A UNITED STATES DEPARTMENT OF COMMERCE PUBLICATION

Incorporating *International Commerce*

MAY 15, 1972

Commerce Today

Coming Developments in Business and Technology

FROM THE
SECRETARY

U.S. Traders—Let Your Views Be Known

(This column was written by Harold B. Scott, Assistant Secretary for Domestic and International Business.)

World Trade Week of 1972 finds this country at a decision point in economic history.

Cries of economic polarization are threatening the one world concept. In Europe these threats come from the possibility of an inward-looking Common Market. In the U.S. protectionist sentiment has coalesced in support of the Burke-Hartke bill.

It is most certainly an increasingly competitive world market; and the U.S. competitive position in this marketplace is now in question. Last year brought the largest trade deficit in U.S. history and the first deficit in this century. This nation also recorded a balance of payments deficit of $30 billion, which itself was greater than the national income of more than four fifths of the nations of the world. Before the changes set in motion by President Nixon's domestic and international programs between August and December of last year, the outlook for the U.S. balance of payments was so bleak as to be clearly untenable.

To turn inward with restrictions on trade would be counter to America's efforts to build a more open, equitable world. The President with his actions of August 15 and the subsequent currency realignments has charted a course to enhance U.S. competitiveness; this has been followed with programs to increase exports, eliminate unfair trading practices and emphasize technology advance and increased productivity.

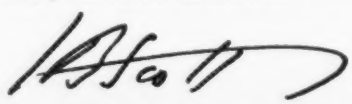
On the export side the investment tax credit, the depreciation guidelines, and the DISC are incentives to increased productivity—with consequent increased profitability in exports. Due to recent legislation the Export-Import Bank is now much more competitive in the terms and conditions it provides in support of U.S. exports. Commercial export credits are no longer subject to the Federal Reserve Bank guidelines. Commercial banks now have ample money available for export at competitive rates.

The U.S. is continuing discussions with its trading partners, seeking to redress imbalances and distortions in trading systems. A significant accomplishment of the Smithsonian talks was the subsequent commitment of Japan and the EEC for a major international negotiation. Informally, it is understood that virtually all of the industrialized countries favor such negotiations and preparations are in process.

This Department would like to hear from the business community as to the existing foreign barriers on which it places the highest priority as targets. We would like to hear from the businessman as to the best ways to support abroad his technology and productivity efforts.

But perhaps as importantly, World Trade Week is an opportunity to speak—to the public and to the officials who influence policy. The mood of Congress is tending toward restrictive trade legislation. Most everyone is sympathetic to the issues which inspired this mood—unemployment and the decline in U.S. competitiveness. An inward-looking approach will be self-defeating.

These problems can be better countered with an offensive effort toward more exports and increased productivity and technology. Let your views be known.

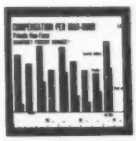


Commerce Today

Incorporating *International Commerce*

Vol. II, No. 16, May 15, 1972

2 Economic Highlights



Special post-freeze factors cause sharpest rise in wages, in terms of purchasing power, in more than a decade; with a more moderate gain in productivity, unit labor costs jump, pointing up need for rapid increases in productivity.

4 Job Gains Tied Now To Trade Prospects

Focus of World Trade Week this month is on building exports through greater productivity and competitiveness and thus strengthening U.S. employment totals.

8 Buyers Coming To City Transportation Built

TRANSPO 72 to feature future urban living, business in environmentally-clean showplace in a nine-day exposition at Dulles International Airport.

11 Thousands Of Veterans Learning On The Job

Returning servicemen have improved chance at employment because of an innovative Outreach program which has operated since last July.

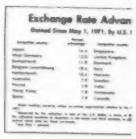
15 Domestic Business Report

Productivity figures give rise to price stabilization—Industry-Government program opening doors for minority savings and loans—Domestic shipping reforms expected to help growth of inland fleet—Census figures show consumers' spending plans up—Firms of 500 or more employees being asked to list jobs.

26 Science & Technology Report

Tornado warning devices may help business—PCB law proposed to limit use, import—Flash-flood warning systems installed—Scientists probe earth fault creep—Patents of special interest.

35 International Commerce Report



Export gains from dollar shift surveyed—Washington's official trade briefs—Results of Oregon mission to Far East—Canada's new investment regulations—Worldwide sales and investment opportunities.

U.S. DEPARTMENT
OF COMMERCE

PETER G. PETERSON
Secretary

JAMES T. LYNN
Under Secretary

B. R. LITTIN
Director of Public Affairs

DICK EVANS
Editor

CLARENCE M. ZENS
Associate Editor, International Commerce

RICHARD BALENTINE
Associate Editor, Science and Technology

ARTHUR McDERMOTT
Associate Editor, Domestic Business

AMERICO A. W. FAVALE
Coordinator of Graphics

Published biweekly by the U.S. Department of Commerce, Washington, D.C.

Annual subscription rate $15 ($3.75 additional for foreign mailing, $14.30 additional for domestic air mailing). Single copy 60 cents. Make checks or money orders payable to Superintendent of Documents and mail to Superintendent, U.S. Government Printing Office, Washington, D.C. 20402, or to any U.S. Department of Commerce Field Office.

All subscription inquiries and address changes should be sent to the Superintendent of Documents, at the above address. This is the central distribution agency for U.S. Government publications.

Microfiche copy available at 95 cents per issue from National Technical Information Service, Springfield, Virginia, 22151.

Other inquiries should be sent to the U.S. Department of Commerce, 14th Street and Constitution Avenue, Washington, D.C., 20230.

Contents of this publication are not copyrighted unless indicated, and if not so indicated, the articles may be reproduced in part or in full without any prior consent. Use of funds for printing this publication approved by the Director of the Office of Management and Budget November 12, 1971.

COVER: *To help focus public attention on the need to expand U.S. exports, Commerce's Bureau of International Commerce is distributing this poster to 40,000 U.S. factories for display during World Trade Week, May 21-27. Story on the goals of this observance, with details on local events, begins on Page 4.*

ECONOMIC
HIGHLIGHTS

Post-Freeze Bulge In Unit Labor Costs Points Up Need For Productivity Gains

Economic Highlights is prepared by Dr. Harold C. Passer, Assistant Secretary for Economic Affairs, and is based on the latest economic indicators (see charts on adjoining page).

Special factors related to the ending of the wage-price freeze caused wages and salaries to rise sharply in the first three months of the year. The rate of compensation per man-hour, in terms of purchasing power, increased at an annual rate of 5.7 percent—the largest quarterly gain in more than a decade. It was the fifth consecutive quarter in which wages have increased faster than prices.

Factors that pushed wages up in the first quarter included: (1) the bunching of pay raises following the wage-price freeze, (2) retroactive raises in pay that were postponed because of the freeze, and (3) the increase in Social Security taxes (which finance larger pensions, and like other fringe benefits, are included in compensation costs). In current dollar terms, wages, including fringe benefits, increased at an annual rate of 9.3 percent.

The figures above are for the private economy but they exclude the erratic farm sector.

As the charts indicate, the large increase in the rate of pay in the private non-farm economy combined with the more moderate rate of productivity gain resulted in a large jump in unit labor costs. And, of course, an increase in production costs leads almost inevitably to an increase in prices. Thus, it is hardly surprising that the implicit price deflator for the private non-farm economy also rose sharply in the first quarter.

The implicit price deflator chart shows the rate of increase for prices in the private non-farm sector of the economy. A somewhat different price measure, the Consumer Price Index, was used in computing real compensation per man-hour in the chart in the upper lefthand corner; in this way, wages are related to the products and services purchased by the average consumer.

The Administration has begun a broad program to increase productivity. For example, the accelerated depreciation regulations and the job development tax credit, put into effect in 1971, provide a strong incentive for business to buy new plant and equipment, and purchases of equipment increased rapidly in the first quarter. This upgrading of the efficiency of facilities obviously is an essential part of the productivity picture.

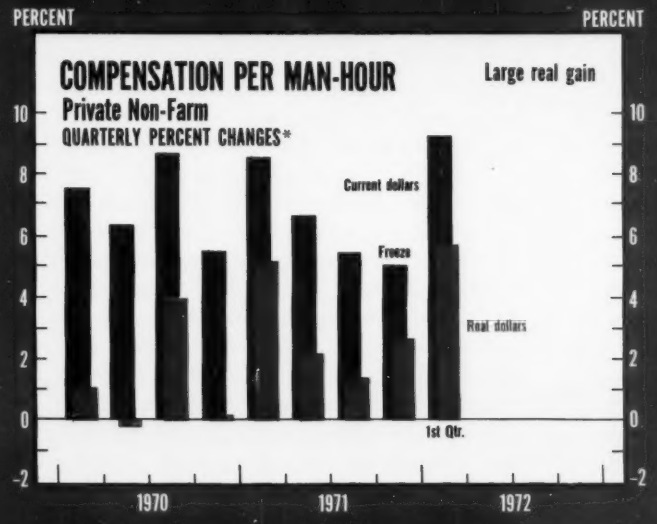
Commerce Secretary Peterson, the new Chairman of the National Commission on Productivity, has emphasized that a high rate of productivity increase is needed not only as a means of holding down prices but also to make American goods more competitive and thereby restore the U.S. balance of trade surplus. He noted that, in recent years, productivity in the U.S. has increased much less than in other industrial nations, most of which devote a much larger percentage of their Gross National Product to business investment.

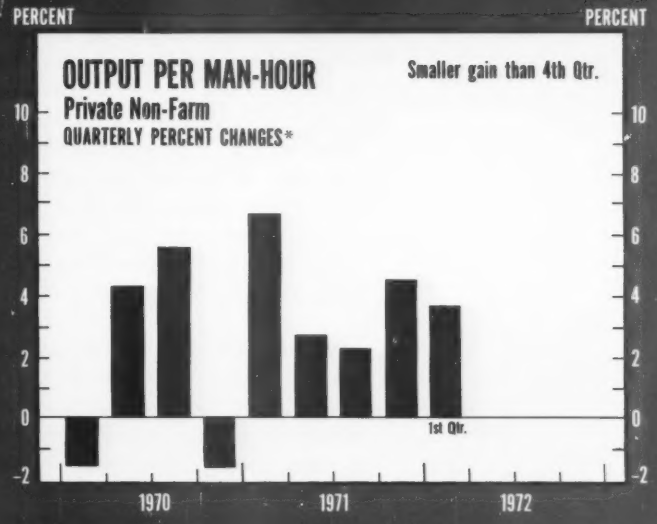
Productivity should move ahead faster during the remainder of the year: output per man-hour usually goes up during a period of strong economic expansion, and new facilities will be coming on stream at a faster pace. Also, wages will not be rising as rapidly because the special post-freeze factors will not be present. Thus, with a better balance between pay raises and productivity increases, there should be a moderation in the rise in unit labor costs and a consequent reduction of inflationary pressures.

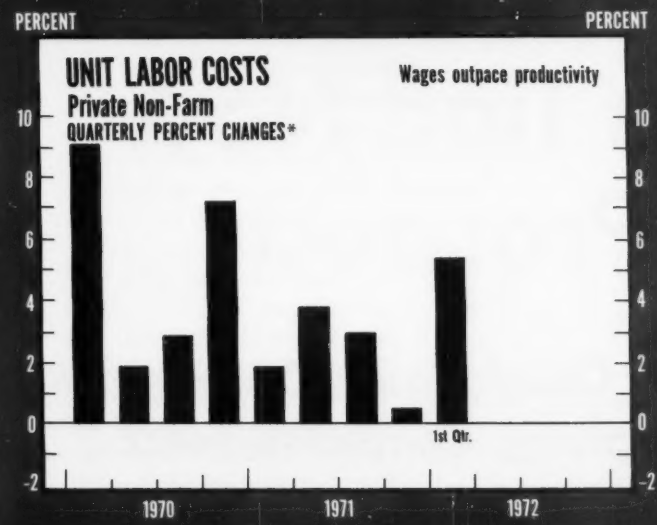
Other economic data

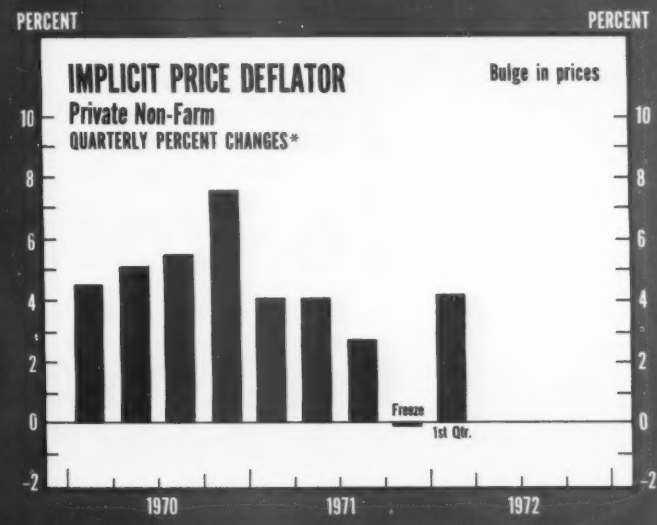
The leading economic indicators continue to rise sharply, pointing to strong gains in the economy in the months ahead. Imports exceeded exports again in March by a large margin, resulting in a record first quarter deficit.

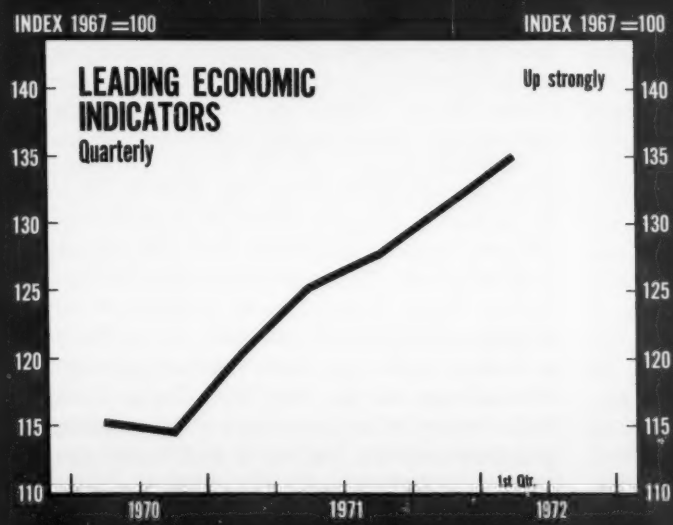
Latest Indicators

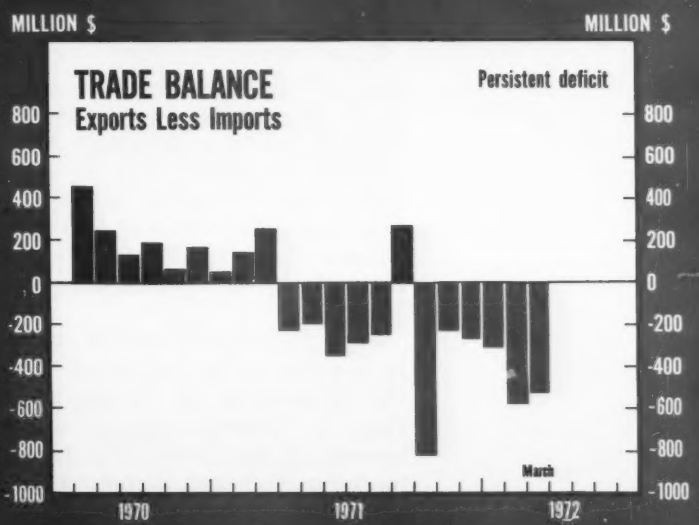












All data seasonally adjusted
Annual rates

Commerce Today
Vol. II, No. 16
May 15, 1972

Job Gains Tied Now To Trade Prospects

Focus Of May 21-27 Countrywide Observance Is On Greater Productivity, Competitiveness

Exports Create Jobs" is a message due to arrive next week on the bulletin boards of 40,000 U.S. factories and hundreds of public buildings.

Its stark poster phrasing is meant to remind the nation of issues as well as opportunities: the need to meet increasing worldwide competition, how to step up faltering U.S. productivity, how to overcome national balance of trade deficits. The timely focus is the May 21-27 observance of World Trade Week.

Supplying the figures that support the exports-and-employment poster prepared by the Department of Commerce, Secretary Peter G. Peterson recently estimated that between 60 and 70,000 U.S. jobs are added for every $1 billion placed on the plus side of the national trade ledger.

Meanwhile, Robert M. Norris, president of the National Foreign Trade Council which reflects the interests of major U.S. companies in international commerce, underlined the extraordinary significance of this year's crowded schedule of trade week observances.

Norris declared: "World Trade Week, essentially, is a time when the U.S. international business community has a special opportunity and responsibility to speak to the general public. These are days when we are moving closer to decisions on matters of the greatest importance in our field. So we have an obligation to the country at large to explain clearly at this time how the policies that are now being shaped can affect millions of American jobs, the health of the free enterprise system and the standard of living of all."

Passage of the Foreign Trade and Investment Act of 1972, the Hartke-Burke Bill, would adversely affect all Americans, consumers and workers alike, as well as cause grave international trade repercussions, Secretary of Commerce Peter G. Peterson told the American Retail Federation May 9.

► American consumers would be denied freedom of choice and be forced to pay higher prices for many products. He said studies show that U.S. price levels would possibly go up at least $10-15 billion, and he pointed out that using 1965-69 totals as import curb levels could drastically hurt current consumer preferences. For example, autos from Japan, now preferred among the imports, would be held to one in every seven permitted to enter the U.S.

► American workers would be the net losers—both as workers and consumers. "It is demonstrable that more U.S. jobs, and higher paying jobs at that, would be lost in the reduction in our exports than will be gained as domestic production substituted for imports."

He said domestic price rises pressured by this action would substantially erode the international competitiveness of the United States. In making this point, Secretary Peterson said, "We know that inflation of the mid and late 1960s had just such an effect. It made our dollars increasingly overvalued in exchange markets, retarded our exports and stimulated imports."

He added that foreign countries would retaliate, economically and politically. Canada, for example, would lose 30 percent of its current exports to the U.S., which would displace 326,000 jobs, the equivalent in U.S. terms of 3.4 million. Under such conditions, he said, retaliation would appear to be inevitable.

He said that holding off the competition from abroad would harm the American enterprise drive which has in recent months through innovations produced such items as the under-$100 mini-calculator.

Acknowledging that the U.S. has serious international problems, Secretary Peterson pointed out that "protectionism, and especially the Hartke-Burke Bill, would exacerbate every one of them. It would solve none of them.

Secretary Peterson outlined measures to take as positive alternatives to the Hartke-Burke Bill:

"We must effectively check inflation to stay competitive both at home and abroad. We must receive fair treatment in international trade from other countries. We must negotiate better rules and procedures to govern the international monetary and trading systems. These steps alone would go far to enable us to maintain a more open trade policy, as indeed they did in earlier periods."

He said that an expected $500 million cost for an effective adjustment assistance program has been criticized as excessive, but he felt, on the contrary, that it was a "good bargain" in saving billions for consumers while preserving U.S. jobs and foreign policy gains.

Secretary Peterson, in his World Trade Week proclamation, saw the U.S. in a "new and challenging position" on the world trade scene.

"If once the United States believed its international economic superiority would persist unchallenged, we now realize that other nation's economies have come of age and are intensely competitive," Peterson commented.

"If once we thought our global economic superiority could persist unchallenged and we could subordinate it to international political and security problems, we now recognize that this had led to increasing trade, monetary and investment difficulties and to trading systems not as equitable or forward-looking as they might have been," he added.

"As the world and our economic position change, so too must our policies change. Two roads are open. One is the easy route to new restrictions on trade. This avenue, I believe, is self-defeating and counter to all we wish to do to build a more open, equitable world. The other is the more demanding route to increased competitiveness and productivity, which will lead to real economic growth and the improved quality of life we all want," the Secretary concluded. (See also statement on inside front cover by Assistant Secretary Scott, and the Calendar for World Traders on Page 57.)

The Chamber of Commerce of the United States, through its International Group in

TRADITIONAL TOUR—*A flotilla of various craft will be displayed in the annual Tour of New York Harbor. Above, part of last year's display, with World Trade Center's twin towers rising at left.*

Washington, coordinates the World Trade Week activities that are organized by local and regional business groups. The Business Service Field Offices of the Commerce Department and the various Regional Export Expansion Councils also provide stimulus and direction for these local events.

A Chamber of Commerce spokesman said that in the years that the Chamber has sponsored World Trade Week there has never been a greater need than today for "a truly aggressive business initiative in expanding U.S. exports."

The Chamber also noted that "the importance of a strong American trade performance has been forcefully underscored by recent developments culminating in the New Economic Policy and the dollar devaluation. These measures provide the necessary means for improving the U.S. competitive position with the rest of the world by assisting American producers to meet foreign competition on a fair and equitable basis."

The trading community will seek to catch the public's attention with some imaginative celebrations. In New York and San Francisco there will be parades of vessels through the harbor areas. In Los Angeles, where World Trade Week began in 1927, the tied-up Queen Mary will be the scene of a celebration, and that city will also have an international licensing and trade show.

Governors get together

The Governors of Tennessee, Mississippi and Arkansas will get together for world trade discussions in Memphis. A North Carolina city has invited the South Carolina Ports Authority to tell its story. St. Louis is the hub of events in many surrounding communities: 9 in Missouri, 5 in Southern Illinois, 7 in Southern Indiana and one in Kentucky. At Kansas City, trade week participants will go underground to have a dinner-reception at a warehouse. Minnesota and Wisconsin are holding their annual State world trade conferences.

Philadelphia is planning a commemoration of the pioneer transatlantic steamship, the S.S. Savannah. In Birmingham five banks are joining to lead the local observance. Special World Trade Week editions are being readied by the *Cleveland Press*, the *Kansas City Star* and the Detroit Chamber of Commerce's publication, *The Detroiter*.

Countrywide wrapup

Other events in individual communities include:

A May 25 luncheon in Miami sponsored by the Board of International Trade and the International Center. Cleveland has scheduled a morning of trade-oriented seminars for May 25, to be followed by a World Trade Luncheon.

In Southern California, Gardena's Chamber of Commerce will hold its fifth annual World Trade Week seminar May 23, while San Diego has planned an export marketing seminar and a World Trade Week luncheon. In addition to the events listed above, Los Angeles will also host an air cargo symposium, a seminar on exports, and a World Trade Week luncheon.

In North Carolina, the city of Charlotte

An unusual feature this month coinciding largely with World Trade Week will be presentations in six cities across the country by a visiting "U.S. Export-to-Japan Promotion Mission" from Tokyo.

The mission will be composed of 18 Japanese business leaders: six representing general trading companies; nine, corporations specializing in consumer goods; and three financial and consumer organizations.

Beginning May 15-16 in Los Angeles, the group will be holding seminars, consultations, and workshops on how to sell consumer goods in Japan. Their other stops will be Kansas City, May 17-18; Dallas, May 19-21; Atlanta, May 22-23; New York City, May 24-25; and Minneapolis, May 26. Mission Director Takeshi Sakurauchi, of Mitsui & Co., Ltd., will travel to Memphis May 18 to address a conference of the Southeastern Regional Export Expansion Councils.

Sponsors of the meetings in the various cities include REECs, U.S. Department of Commerce Field Offices, chambers of commerce, and trade associations.

will host a reception sponsored by the South Carolina State Ports Authority, and there will be World Trade observances in Greensboro, High Point, Gastonia and Hickory.

The governors of three states will attend the World Trade Day luncheon in Memphis, which is being held in conjunction with a regional meeting of the Southeastern REEC. Little Rock's World Trade seminar will be sponsored by the Arkansas Exporters' Roundtable, and Atlantic City will hold a special World Trade Day program during its 1972 Spring Joint Computer Show.

Milwaukee celebration

Under Secretary of Commerce James T. Lynn will address Milwaukee's World Trade dinner, climaxing the Eighth Annual Wisconsin International Trade Conference. Under Secretary Lynn will also address the luncheon at the "Governor's Conference on Export Expansion," sponsored by Iowa Gov. Robert D. Ray in Des Moines May 23.

Celebrating a week ahead of most of the rest of the country, Kansas City is emphasizing trade with Japan. Highlighting a full week of trade seminars and promotional activity, the Great Midwest Corp. will host 600-800 at a dinner in their underground warehouse and distribution center. Detroit's REEC will sponsor a World Trade luncheon, as will the Michiana World Trade Club in St. Joseph, Michigan.

Under Secretary Lynn will address St. Louis' World Trade Week luncheon, and a special dinner of the World Trade Club of St. Louis will feature the Port of Mobile.

Bay Area observance

San Francisco and Oakland will hold World Trade Week luncheons, and a Golden Gate Marine Parade will pass in review on San Francisco Bay.

Philadelphia's World Trade luncheon will be sponsored by the Mayor's Committee on World Trade, while Atlanta's is being handled by the Georgia International Trade Assn. The Propeller Club and Hawaii World Trade Association will combine on Honolulu's World Trade luncheon, and the World Trade Club of Greater New Orleans will sponsor that city's luncheon.

Mississippi Gov. William Waller will host a Biloxi reception for international businessmen, and Savannah will hold a REEC Trade Week luncheon and a Maritime Day Banquet sponsored by the Propeller Club on the same day.

Traditional harbor tour

New York will hold a World Trade Day luncheon and its traditional Harbor Inspection Tour, featuring craft of all shapes, sizes and degrees of significance in world trade. The World Trade Center-based World Trade Institute will hold a two-day conference on international organizations and global business. Long Island's World Trade Day luncheon will be held at Hauppauge. Newark's World Trade luncheon will be addressed by Carl A. Gerstacker, Chairman of the National Export Expansion Council.

A pre-recorded, 30-minute radio discussion on the significance of world trade will be broadcast on a leading New York City radio station.

Boston's observance will center on a Propeller Club dinner and a World Trade Day luncheon. In neighboring Stratford, Connecticut, the Combination Export Managers Association will hold a general luncheon meeting.

—Bureau of International Commerce

Buyers Coming To City Transportation Built

TRANSPO 72 To Feature Future Urban Living, Business In Environmentally-Clean Showplace

TRANSPO CITY—*An artist's aerial view of the 300-acre site of TRANSPO 72 at Dulles International Airport. Rendering of the exposition is in scale with the airport terminal and tower at top left.*

A 300-acre international city—featuring a nine-day population of 1,125,000 or more and a 150-acre marketplace has sprung to life adjacent to Virginia's Dulles International Airport.

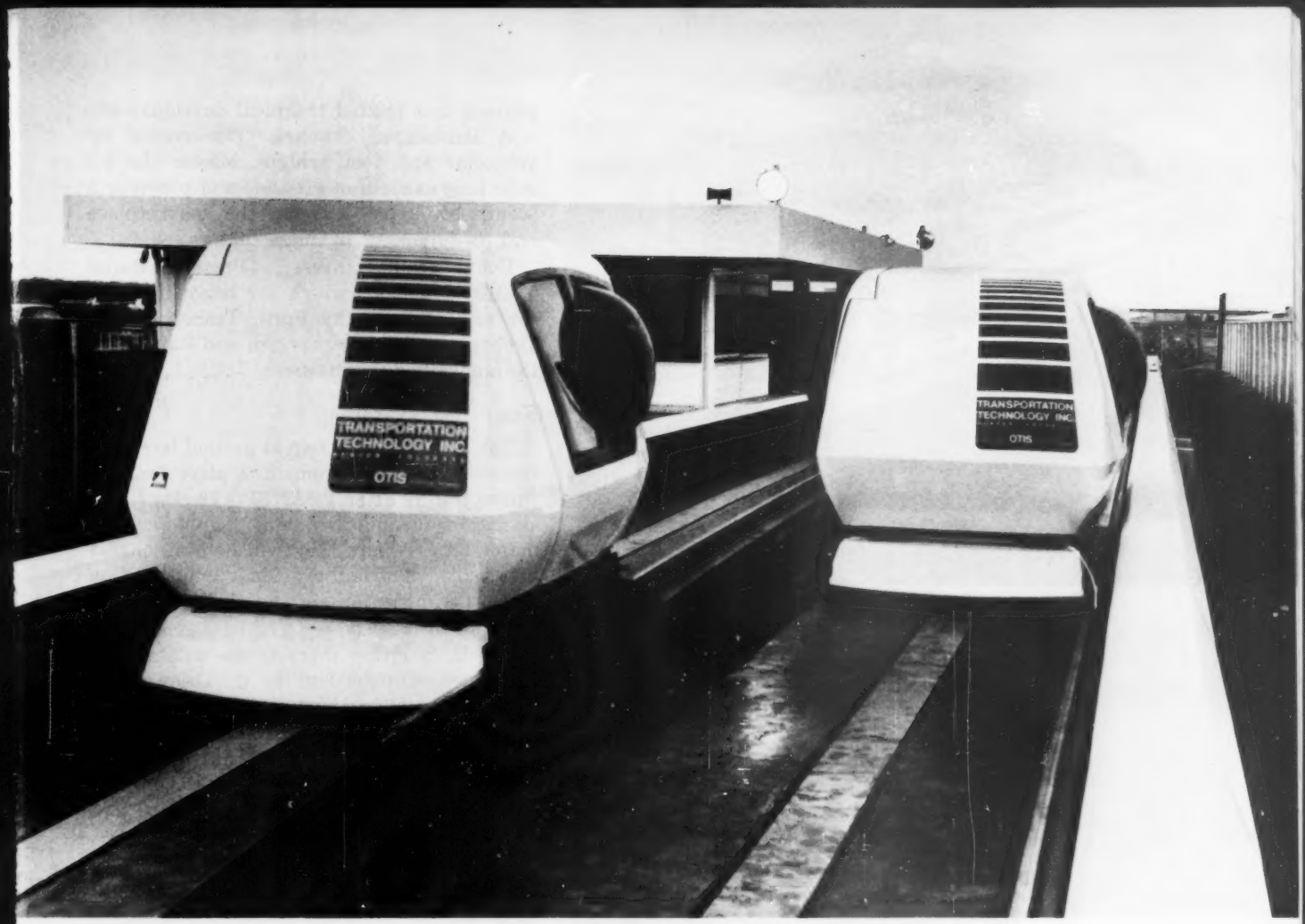
The city is TRANSPO 72, the United States International Transportation Exposition, May 27-June 4.

City marketplace

The marketplace within the city provides the ideal setting for the transportation industry to exhibit and demonstrate its wares to buyers and other sellers and plain sightseers.

President Nixon is expected to be the city's first official visitor when TRANSPO 72 officially opens its gates May 27. The Exposition will be highlighted by spectacular surface and air shows May 27, 28, 29 and June 3 and 4.

Invited to tour the giant showplace in a special preview day May 26 are members of Congress, the diplomatic corps, leaders of domestic and international government and



PERSONAL RAPID TRANSIT — *Transportation Technology, Inc., will demonstrate a new concept in public transportation. This prototype travels on air cushions elevated in "guideways" at ground level, suspended alongside building structures or even in buildings so passengers may travel inside.*

industry and representatives of the news media.

TRANSPO 72's futuristic city will feature equipment and personnel to provide public service and utilities, sanitation, safety, government, highways, inner city transportation, airport facilities, adequate parking, medical facilities, child care provisions, complete communications and a modern business district—all with an emphasis on environmental compatibility.

"Obviously, TRANSPO 72 will help open new markets abroad for U. S. products and assist in reversing our current balance of payments position," states William J. Bird, vice president of Kaiser Industries, Inc., who has overall responsibility for developing TRANSPO 72. Bird is serving without pay as special assistant to Secretary of Transportation John A. Volpe, President Nixon's designee to head this government's first international exposition.

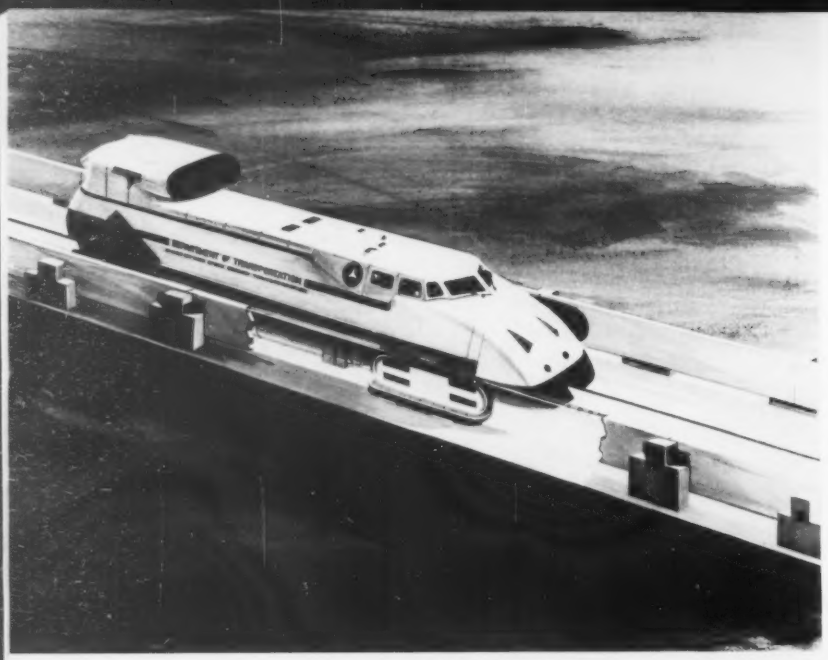
"We want to emphasize the function in future transportation of totally integrated systems and we want to make the public aware of the transportation industry's importance to the social, economic and cultural progress of man," Bird continued.

Of the TRANSPO budget, $2.8 million is provided by a Congressional appropriation and the remaining $3.7 million from space sales, ticket sales, parking fees, sale of programs, directories and concession fees.

The vast marketplace will have an international flavoring with exhibits representing transportaiton industries of Romania, Great Britain, Canada, France, Israel, Italy, Brazil, Japan and Germany.

Domestic industries run the gamut from Air Cargo Equipment Co. of Tulsa, Okla., to World Wide Wilcox, Inc., of McLean, Va.

Much of the 1.35 million square feet of indoor and outdoor display space has been reserved by such leaders as American Tele-



AIR CUSHION VEHICLE—*The Department of Transportation's 300-mile per-hour Tracked Air Cushion Research Vehicle will be a featured attraction at TRANSPO. It rides on a thin layer of air instead of wheels and is guided by air cushions blowing against the sides of its concrete guideway.*

TICKETS AND SMILES—*Miss Barbara Wilson, TRANSPO 72 hostess, presents Secretary Peterson with tickets to the International Transportation Exposition which opens May 27 at Dulles.*

phone and Telegraph Co., Avco Corp., Boeing, Colt Industries, Eastman Kodak, Fairchild, General Electric, General Railway, Goodyear, Grumman Aerospace, LTV Aerospace, 3M Co., Otis, PPG Industries, Sperry Rand, Texas Instruments, TRW, United Aircraft, Westinghouse and others.

Ford Motor Co. and General Motors will have their own pavilions, more than 20,000 square feet each, in addition to outdoor display space. They, and others in the automobile industry, will display the newest in automotive safety innovations, low emission engines and related technical developments.

A landscaped channel, criss-crossed by vehicular and foot bridges, bisects the 1.5 mile long exposition grounds and provides a scenic boundary between the marketplace and its suburb of business centers.

Four "people movers," (Personal Rapid Transit systems), which are being installed for test purposes by Ford, Transportation Technology, Inc., Dashaveyor and Rohr flank the landscaped channels.

Four test systems

The PRT systems, two at ground level and two suspended, will remain in place for continued testing after TRANSPO 72 closes. Installation of similar systems is planned for major cities where they will help decongest inner city traffic and provide a pollution free mode of transportation.

While so much of TRANSPO 72 parallels major U. S. cities, there is one outstanding difference. Conspicuous by its absence will be the internal combustion engine. No conventional cars, buses or taxis will be allowed on the exposition grounds during public hours. Only clean, quiet, electric golf-cart type vehicles, plus the electric-powered and linear-induction run "people movers."

Exhibitors will be emphasizing future land, sea and air vehicles which have been designed to provide efficient, economical transportation of people and freight with a minimum of fumes, noise and combustion particles.

Visitors will see prototypes of automobiles which run automatically at safe, present speeds using underground electrical guidance or highway side guardrail systems, experimental turbine passenger trains that can travel at speeds in excess of 300 miles per hour, advance freight-handling devices, futuristic communications systems and the airports and terminals (in scale models) to accommodate them.

Instead of metal, throw away cans and the usual fare of paper plates and cups, officials intend to provide "souvenirs" cups and utensils, sporting the exposition's design and label, at the concession stands and dining establishments.

"The idea," according to a TRANSPO official, "is to give the visitor something worth taking home to remind him of this historical event, rather than using ordinary cups and paper plates that would be discarded on the spot.

Thousands Of Veterans Learning On The Job

Returning Servicemen's Employment Chances Growing Due To Innovative Outreach Program

The first on-the-job training program in real estate management to be approved for veterans is beginning in Cleveland, Ohio.

• A prototype apprenticeship program leading to certification as a journeyman electrician is offering 1200 new openings to returning servicemen nationwide.

• More than 2600 new jobs for veterans which require no particular skills or further training have been found in the northern part of California alone.

All of these new opportunities have been opened up for the servicemen returning to a tight labor market by the Veterans Administration's On-The-Job Training Outreach program, begun last July with the support of the National Job for Veterans Program.

OJT Outreach has dispatched 200 persons experienced in veterans benefits throughout the country to uncover new jobs for the young Viet-Nam-era veterans, who despite many civilian-related skills learned in the service, are experiencing significantly higher unemployment rates than nonveterans of the same age.

CLEARING OUT—*Sgt. 1.C. Gerald L. Benzel (left) collects outgoing mail from his men during the clearing out of a landing zone in Viet-Nam. These veterans will get a chance at on-the-job training through the Veterans Administration's "Operation Outreach" Program, when they return to civilian life.*

TELEVISION SPECIALIST — *Sp. Roger Pierce aligns the Instructional Technology Center's videotape recorder prior to a produtcion. Enlisted technicians are selected from the top graduates of the television repair course at the Army Signal School.*

Members of the Outreach staff have been contacting employers in all parts of the Nation to explain the on-the-job training program available to veterans through the current "GI Bill," and to help these employers develop programs that will be approved by their states for veteran enrollments.

Noticeable results

Among the results of the Outreach Program effort have been the Ohio program, the electrician apprenticeship, and the job slots opened up that need no training.

In Cleveland, the Ohio Association of Real Estate Boards, an organization comprised of 78 local real estate boards and 28,000 actual members, decided to help.

With VA assistance, the Board developed this first real estate management program for veterans, which is composed of a two-year management training program, including studies in appraisals, management and bookkeeping, and other related formalized school training as well as on-the-job actual experience in real estate management.

A veteran, upon completing the Ohio State-approved training course, can earn at least $600 a month.

The prototype apprenticeship program designed by the Associated Independent Electrical Contractors not only has been registered by the Department of Labor as an approved apprenticeship program (a requirement under this program to meet the standards prescribed by the Secretary of Labor), but it has opened up 1200 new job training slots leading to certification as journeymen electricians for returning servicemen.

The new openings under this program not only will be filled by veterans but have been certified under the "GI Bill" and, consequently, will add VA benefits to veterans enrolled in the program.

Two types of programs, under the "GI Bill," are open for employer development—jobs that require at least six months' training (but not more than two years) or apprenticeship training programs (which may exceed two years).

State approval needed

Both types need state approval so that the veterans involved can receive the GI benefits. The agency with the state responsibility of approving the programs varies from state to state. In California, it is the Department of Industrial Relations in San Francisco; in Texas, it is the Texas Education Agency in Austin; in New York, it is the State Labor Department in Albany.

In any event, the individual state must approve the program, the VA is not involved in this phase. However, the nearest VA or State Employment Service office can direct employers to the proper agency in their states to apply for this approval.

Included in the requirements for a VA apprenticeship program are organized instruction in technical subjects related to the trade, a work schedule which will include training on the job, a progressively increasing schedule of wages, non-discrimination in all phases of apprenticeship employment and training in several others. Apprenticeship training programs may exceed two years in length.

Other on-the-job training programs established by employers and approved under VA regulations require at least six months training (but not more than two years) for a well-defined job the trainee will reach and be offered with reasonable certainty.

The employer-developed program must also provide related instruction when needed, give adequate training course content, equipment and have available a qualified instructor, and make up an individual training agreement for each veteran accepted in the program and keep progress records on his development.

In developing both apprenticeship and on-

the-job training programs across the county, the OJT Outreach staff has also been responsible for discovering other job opportunities for veterans which need no further skills or training other than what the veteran has.

More now involved

As a result of the staff effort, more employers are now listing these job openings with the state employment agencies to give veterans a chance to get these jobs.

In different parts of the country, the Outreach staff uses different approaches to finding job training positions or just plain jobs for veterans. In one state, the regional office of VA goes through the want ads, calls the employers looking for workers to explain how an employer could take advantage of the OJT programs through training a returned serviceman for the job.

Employers realize wide benefits through OJT programs, as well. Under state-approved programs, businesses can hire and train returning servicemen at a beginning wage of at least half of the target salary, to be gradually increased to at least 85 percent of the journeyman's wage by the last month of training.

The single veteran being trained in the job will receive other compensation from the VA. If he is an eligible veteran with post-Korean service, the single veteran can receive $108 per month from the VA for the first six months of his training, $81 per month for the second six months, $54 per month for the third six months, and $27 per month for the remaining period. Additional amounts are paid when the veteran is married and has dependents.

Potential training slots

Up to now, as a result of the VA Outreach program, 66,599 new potential job training slots for veterans have been opened up throughout the United States.

In the month of March alone, 10,481 of these job slots were developed.

The VA estimates that by the end of this fiscal year, this vital part of their work for veteran employment will result in nearly 75,000 new job training slots opening up since last July. And in the next fiscal year,

WAITING FOR JOBS—*Veterans recently released from military service are pictured as they wait to sign up for job training and civilian jobs. The OJT Outreach Program is one project set up to help them. Another, mandatory job listings with State Employment Services, is discussed on Page 22 of this issue.*

HOMEWARD BOUND—*Veterans aboard this plane headed for the United States can rest a little easier knowing opportunities for job training programs and civilian employment await them at home.*

the agency conservatively estimates another 50,000 job openings will be available under the OJT program.

Further impact

The agency itself is adding further impetus and attraction to the OJT Outreach program. The VA, to give the training and education benefits available to veterans more strength and attention, has separated this portion of its programs into a single division, beginning May 1. The new department, formerly part of the Compensation, Pension and Education Service, now stands in a more responsive spot, as the Education and Rehabilitation Service.

The new VA division will not only handle the on-the-job training development for the returning servicemen and women, but it will also be responsible for the vocational rehabilitation service part of the Veteran Administration, including the benefits available through college and technical school veterans offerings.

Included in the vocational rehabilitation service segment of the program is full cost coverage in the colleges or technical schools for disabled veterans with pronounced employment handicaps.

Not only are these disabled veterans counseled by the VA through these rehabilitation programs, but upon completion of courses taken to date, 95 percent of those graduated have been placed in jobs. In each case, the VA counseling of the disabled vet follows him all the way through the course, with a view towards realistic goals that fit his capabilities and his interest patterns.

Veterans with service connected disabilities resulting in pronounced employment handicaps are eligible for this full cost covered educational service.

Trade association

A new campaign, aimed at opening up even more job training slots, has already been launched by the Jobs for Veterans Program and the new division. This campaign is geared towards trade associations and their member organizations.

Under the new drive, not only are trade associations being asked to publicize the on-the-job training effort of the Veterans Administration to their member organizations through their publications and letters, but they have been given an added incentive—

Each new on-the-job training program developed by a trade association or any one of its members in even one state will be distributed in detail to all regional offices of the VA in the United States, so that particular program might be able to be set up as a prototype for employers in other states.

Letters are in the mail now to several of the national trade associations, urging their cooperation in this effort.

More needed

It's true, the unemployment rate of the returned serviceman, while still higher than the civilian at home, is dropping. But much more still needs to be done.

More servicemen are on their way home. A million or more men and women have been released from the service and returned to civilian life during each of the past few years. But, over one half million more will be released during the remainder of this year.

Over the year, however, because of the team efforts of veteran-oriented groups, civic organizations, business and government, the number of Viet-Nam-era veterans working (seasonally adjusted) has risen by almost 600,000, while unemployment increased by less than 25,000.

—*National Jobs For Veterans Program*

DOMESTIC BUSINESS REPORT

- **Productivity figures hold back price increases**
- **Industry-government program opens minority doors**
- **Domestic shipping industry will get new look**
- **Census figures show consumer spending plans up**
- **Firms of 500 or more asked to list jobs for 'vets'**

Productivity Figures Reduce Price Increases

The Price Commission has released new productivity figures for use by firms computing permissible price increases.

New figures

The new figures, based on industrywide averages, are to be used in place of individual company productivity figures. C. Jackson Grayson, chairman of the Price Commission, said use of the new industrywide figures is expected to reduce the size of future price increases and to provide an additional incentive for firms to increase their productivity.

Firms with productivity gains above the Price Commission's industrywide average are required to deduct only the industry average as an offset to their cost increases, thus encouraging above average productivity gains.

Firms with productivity gains below the new industrywide averages must now use the industry average figure instead of their own lower productivity figures. Therefore, their allowable cost increases will be proportionately smaller.

The new productivity rule applies to all Tier I, Tier II and Tier III manufacturing and construction firms, effective immediately.

Deadline date

After May 12 no price increase request will be accepted by the Commission unless it is based on the new productivity data. Requests received before May 12 will have the new figures applied by the Commission.

Grayson said service organizations, except construction, are temporarily excluded from the ruling while the Commission continues productivity studies in this area. These firms will continue to use company productivity data when calculating allowable costs.

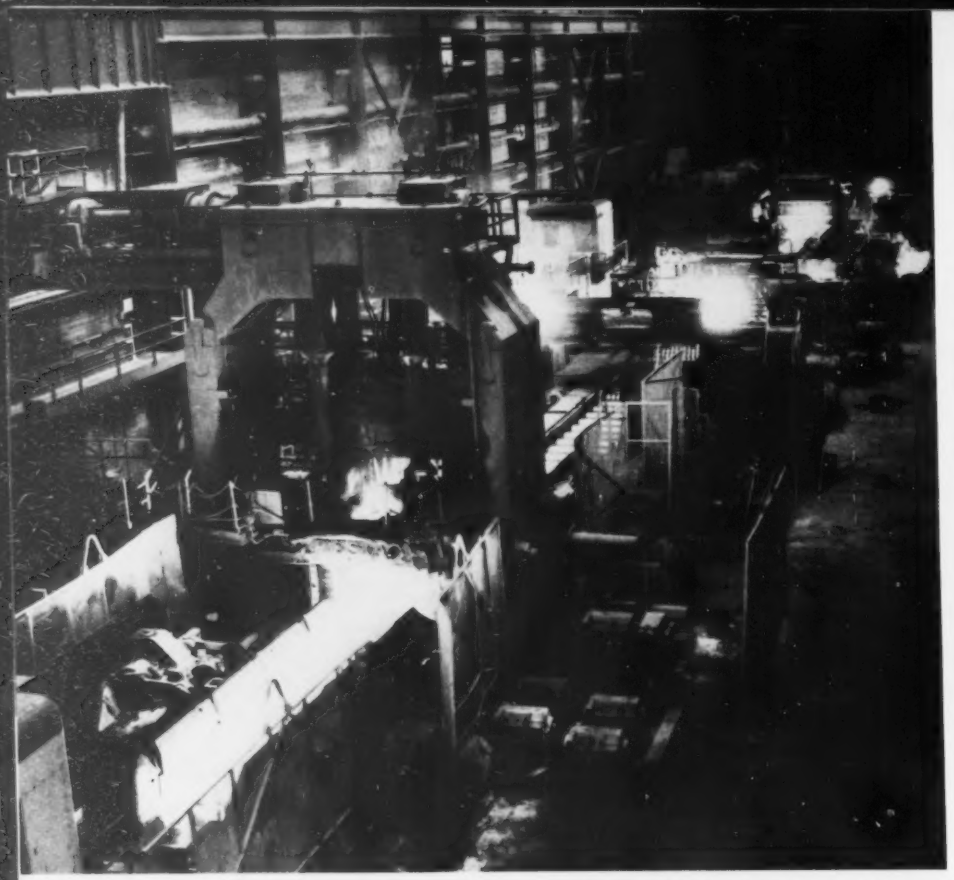
All firms seeking and computing price increases continue to be subject to the Commission's profit margin tests.

'Critical weapon'

"American productivity is a critical weapon in the battle against inflation," Grayson commented. "The Commission's new productivity policy provides new incentive for American business to increase productivity and to contribute to the anti-inflationary pressures which productivity provides."

Grayson said the Commission has insistently impressed upon company representatives the need for high productivity awareness and equal awareness of valid and continuing measuring techniques.

"The Price Commission believes



PRODUCTIVITY—*Slabs are rolled on the mill at Bethlehem Steel's Lackawanna plant. Water pumped from Lake Erie is used to cool the processing equipment, clean the heated steel and collect scale in a sluice system beneath the rolling mill line.*

it may have performed, and will continue to perform a valuable educational function in this (productivity) area," Grayson asserted.

"Today, because adequate productivity measurements are mandatory before any company may receive an allowable price increase, there is considerably greater information about the importance, nature and computation methods than existed heretofore," the Price Commission chairman concluded.

New examples

New PC-1 instructions contain a detailed example describing the method by which companies may compute the extent to which productivity should offset allowable costs.

For further information on the computation and other information on productivity, persons should contact local Service and Compliance Centers of the Internal Revenue Service. *—Price Commission*

Productivity is the relationship between physical or real output of goods and services and the corresponding physical or real quantities of one or all associated inputs. The productivity concept used for the industry productivity figures is "output per man hour."

The measure of productivity used is the ratio of total volume of physical output to the number of man hours worked to produce these outputs.

Although this measure relates output to employment and man hours, it does not measure the specific contributions of labor, capital, or any other factor of production. Rather, it reflects the joint effect of a number of interrelated influences, such as changes in technology, capital investment per worker, changes in the level of output, utilization of capacity, material usage, managerial skill, and skills and effort of the workforce.

—Price Commission

Pay Board Publishes Wage Increase Rules

The Pay Board's final regulations with respect to wage increases under merit plans are applicable to both employees not covered by collective bargaining agreements, as well as those under union contracts.

Under the regulations, the Pay Board generally described for employers how the guidelines are to be applied in three different situations.

Merit plans in existing contracts and certain non-union merit programs may continue to operate without regard to the guidelines—subject to challenge—until they expire. To qualify for this treatment, the contract or the merit program had to have been in effect on Nov. 13, 1971. In the non-contract case the total sum to be expended for merit raises must have been finally determined prior to Nov. 14, 1971 and communicated to either the management personnel charged with implementing the pay adjustments or the employees affected. These conditions must be adequately documented.

There was also a special exception created for certain qualified merit plans whereby increases are permitted up to 7 percent. This exception relates to merit plans which are carried over in successor labor contracts or which are carried over in successor pay practices. In either case, to qualify for the 7 percent exception the contract or pay practice must have been in writing on Nov. 13, 1971 and must meet several other conditions.

In the third case, increases under merit plans which do not qualify for special treatment under Pay Board regulations described above are subject to the 5.5 percent general wage and salary standard.

—Pay Board

LOOKING TO THE FUTURE—*Inner city residents are encouraged to save by minority-owned or operated savings and loan associations. Some, such as Independence Federal Savings and Loan, Washington, D.C., also grant 90 percent of their loans to minorities. There are 48 minority S&Ls in the U.S. today.*

Industry-Government Program Opens Minority Savings And Loan Doors

As minority businessmen increase their numbers in the savings and loan industry for the first time, "Associados," a unique training program is giving them the where-with-all to make it.

One year approvals

Fifteen minority savings and loan charters were approved during the past 12 months.

Fifteen is a record number for the establishment of minority-owned or controlled savings and loan associations in the United States in a one-year period. Ten of the 48 associations now operating were granted charters in 1971, none in 1970 or 1969, and only three in 1968. Some date back as far as 1888.

One of the 1968 charters was granted to a minority-controlled association in Washington, D.C., and represented not only the first black-controlled savings and loan association for the District, but also the first savings and loan association charter granted in the city in 32 years.

Today that association—Independence Federal Savings and Loan Association—has a capitalization of more than $15 million and is accomplishing its stated goals of granting loans to blacks within the District, encouraging thrift savings accounts by black persons, and training members of the black community in the industry.

Two important points

Two factors appear to mark the rise of minority group Americans in the savings and loan industry . . . a crucial need for the service and a cooperative effort of government, majority and minority savings and loan institutions to train effective managers.

Of the 15 new minority savings and loans established this year two were black and 13 Spanish oriented.

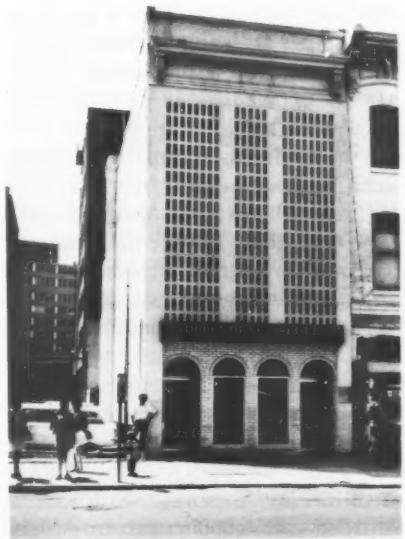
"The need for Mexican-American savings and loan institutions is crucial," said Robert Sangster, director of the Federal Home Loan Bank Board's Office of Housing and Urban Affairs.

The success so far of several that have opened already demonstrates that savings and loan associations managed by Spanish surnamed individuals can compete effectively, he concluded.

Asserting that "there are literally millions of Spanish-speaking families in the Southwest and West prepared to do business with this kind of institution," Sangster predicted that as soon as they have established their bases, these organizations will be able to expand competitively in meeting the needs of all people in their communities.

Partners in business

"Associados" means partners in a business sense. Raymond C. Chavez, former New Mexico Savings and Loan Commissioner, was hired by the FHLBB to develop the program and establish working relationships between the minority



STURDY INSTITUTION—*Independence Federal Savings and Loan, Washington, D.C., has been in business since 1968, and is growing steadily. The savings and loan plans to participate in the next 'Associados' training program.*

SAVINGS AND LOAN PRESIDENT—*William B. Fitzgerald, president of Independence Federal, is shown at work in the savings and loan association. Fitzgerald heads the first majority black-owned savings and loan to open in Washington, D.C., and the first savings and loan to open in the District in 32 years.*

institutions and the established white-operated associations.

In "Associados" the directors and managing officers of minority institutions can obtain training in savings and loans operations over a one-week period at a major savings and loan institution in another city. Such training is particularly necessary when a managing officer has no experience in savings and loan procedures.

Two training classes have been completed.

Eventually 120 managing officers and directors will receive training from 30 white associations, according to the American Savings and Loan League, which is coordinating the training effort. The ASLL is a trade association for minority savings and loan institutions.

In February, Commerce's Office of Minority Business Enterprise awarded a $55,000 grant to ASLL to pay expenses of the minority training in one-week programs as well as expenses of taking followup home correspondence courses on savings and loan operations from the American Savings and Loan Institute.

During the training programs individuals spend a day studying each of five major functional areas: savings operations, loans, accounting, collections and management. Four hours of formal classroom presentations by operational officers and three hours observation of actual operations.

Thomas C. Marshall, deputy director of the ASLL, said the program helps minority officers understand the systems and procedures used by larger institutions, which he might adopt to expedite his own work load.

Needed relationship

"It also establishes a relationship with a noncompetitor who is a specialist in an area and can advise him," Marshall continued. "Also, the fact that the minority trainee goes to another geographic area for the week gives him an opportunity to air problems which he might not want to bring out in the open to a S & L established in his own city."

Based upon the success of this program, ASLL is developing a proposal for the 100 largest members of the United States Savings and Loan League for the leagues to cosponsor a long term management training program for all minority-owned or controlled savings and loan associations.

Preliminary feedback from participants who attended the first Associated Orientation Training Program suggest "it was very beneficial" to both training institutions and participants, according to Marshall.

The host institutions, he said, were better able to understand some of the unique problems of the minority associations, such as the multiplicity of tasks that the operating officers of the small institutions must perform.

Sangster said the program is causing a "lot of prejudices to be going by the board" on the part of minority as well as white S & L executives.

"The minority officers are finding a good deal more acceptance than they anticipated, while the white officers have been impressed by the ability and desire for knowledge on the part of the minority executives."

The rise of minorities in the savings and loan association field has accelerated from FHLBB's efforts in this direction. The increase in application activity represents the early results of special communication, research, consultation and educational efforts undertaken by Sangster's office. Its general objective was to find ways to encourage savings and loans to increase their participation in low and moderate income building.

The 48 minority savings and loans associations now in operation represent less than 1 percent of the more than 4,700 state and Federally chartered savings and loan associations in the nation.

But, five new applications are now under consideration. Progress is being made.—*Office of Minority Business Enterprise*

INLAND WATER TRAFFIC—*A tug-barge is shown pushing a cargo on one of the United States' busy inland waterways arteries of domestic shipping industry.*

New Look For Domestic Shipping Outcome Of Inland Fleet Conference

The domestic shipping industry has asked the Maritime Administration, the agency charged with promoting it, to aid in making sweeping changes in Federal policies to assist its future growth.

Hoped-for changes

Request for review and major change of present regulatory practices, protection and possible legislation, if necessary, to protect the inland shipping trade against what it calls "the growing menace of foreign-flag competition" were sought by the industry last week at a four-day meeting in St. Louis, Mo.

The conference was called to review these practices and to formulate a new policy aimed at looking after the interests of the industry by the Commerce Department's Maritime Administration, the agency involved.

Keynoting the opening session Apr. 30, A. E. Gibson, Assistant Secretary of Commerce for Maritime Affairs and head of MarAd, expressed the hope that as a "result of these meetings, there will be developed well-defined programs which will enable the Maritime Administration to assist the domestic shipping industry to maximize its contributions to our national transportation system."

Gibson pointed out that the highways were overcrowded and that the railroads have both financial and operational problems at present. Because of this, he stressed the vital role domestic shipping has to play in the development of America's total transportation network.

"Water carriers," he said, "are in a strong position to fill the gap in our future requirements left by other modes.

"For one thing, the domestic shipping industry has a greater leeway to grow. We have not come close to reaching the capacity limitations on our waterways, as we have on our highways.

"Secondly," he continued, "the domestic shipping industry has a proud record of innovations—the constantly growing size and power of units operating on the inland waterways, highly sophisticated containerized systems, and ocean-going tug-barge units in the offshore trades that dwarf the tankers they are replacing are some of the prominent examples."

Room to expand

The Assistant Secretary noted that today's domestic fleet is not taking advantage of its present growth opportunities, "much less future ones."

"Based on our analysis of the 1967 Census of Transportation," he explained, "domestic operators are only carrying half or less of the manufactured products that represent their potential market in a dozen major production areas in this country."

Gibson said the domestic shipping industry has the opportunity to more than double its present carriage.

Part of the problem has been no spokesman for the industry within the Federal Government. This has now been changed, under President Nixon's new Maritime Program, and MarAd today is promoting the long-term interests of the industry, through its new Office of Domestic Shipping.

The six-months old office, in researching the problems, was instrumental in calling the St. Louis National Planning Conference on Domestic Shipping.

It also has undertaken to perform as an "ombudsman" for the domestic shippers within the Federal Government. In this role, it has been partially responsible for tankers in the domestic trade being made exempt from price-freeze controls because of undue harm these were doing to the in-

dustry; it has proposed to the Coast Guard that a joint study of casualty statistics relating to accidental pollution from tank barges be set up to determine what structural changes will be needed in these vessels to meet a non-pollution goal; it is also prepared to take any steps necessary in the area of rate-making to insure that the needs of the water transport industry are considered on an equal basis with other modes of shipping.

R & D projects

Research and development projects for the benefit of the domestic shipping industry are also being launched by this Maritime Administration office, including projects to extend the season of Great Lake shipping.

Gibson called on the domestic shipping industry for close working cooperation with the Maritime Administration to help enhance the industry's need.

"We believe, "he concluded, "that greater progress can be made by the two of us, industry and government, working together, than by either of us working alone."

A series of recommendations ranging all the way from multibillion dollar channel and harbor projects down to the link-up system of river barges were proposed by the conference attendees.

The proposals include a request for the complete revamping of governmental regulations to assist the industry to rebuild its aging domestic fleet more economically, requests for better financing assistance and a shipbuilding policy that will not only cover the Great Lakes but also the river fleets.

The Administration was also asked for a project to develop new types of vessels for use in the changing inland cargo movement and the construction of several new types of vessels to handle trade where adequate port facilities are not available and in the tanker feeder runs to offshore facilities.

Other recommendations call for major overhauls in insurance coverage, freedom from the imposition of user charges in the waterways, and new policies on regulated and nonregulated barge cargoes.

Training void

The meeting has also resulted in recommendations for training for the inland water industry—both at Kings Point Merchant Marine Acedemy in New York and the establishment by the Federal Government of several new training schools at inland ports.

Labor union panel representative, Ray McKay, Marine Engineer Beneficial Association president, who spoke at the conference for the multiunion Maritime Trade Department, strongly recommended that labor and management get together to discuss the issues presently existing between them and to establish priorities aimed at meeting some of the requirements needed for growth.

Consultant for the Environmental Protection Agency, Henry Santiago, outlined several studies made on tanker and barge construction and indicated a new program would be drafted shortly by that agency.

Deputy Assistant Secretary for Maritime Affairs, R. J. Blackwell, said that the Maritime Administration is pledging itself to develop programs that will deal with the problems of the domestic shipping industry and to create a climate which will help to foster its future growth and development.

He explained that while it is premature to specifically detail future plans and problems at this time, "there are, nevertheless, a number of observations that can be drawn at this time."

Successful meeting

These observations came from the successful St. Louis meeting, which, according to the Deputy Assistant Secretary, not only brought diverse domestic segments together, but established a working relationship and cross-fertilization process that "will indeed enable us to capitalize on the collective strength of the industry."

A six-man industry steering committee was formed to work with the Maritime Administration as a standing committee on domestic shipping. This committee will monitor and periodically report the progress being made in carrying out the new industry programs.

—Maritime Administration

Agency Head Sees Job Losses, Closings, In Air-Water Cleanups

It's unrealistic to demand that the foundry industry adopt pollution control devices in a limited time frame and not consider the resulting displacement of workers, Hudson B. Drake, Deputy Assistant Secretary of Commerce, has asserted.

Drake said at the same time there is a need for conciliation to bring together environmentalists and businessmen with conflicting views.

The Deputy Assistant Secretary and Director of the Bureau of Domestic Commerce addressed the opening session of the 39th International Foundry Congress in Philadelphia last week.

Noting a recent government study which showed that while the overall economic impact on the nation won't be severe, Drake said air and water cleanup costs will result in plant closings and the loss of jobs in the metal industries.

"The study indicates, for example, that U.S. iron foundries face a jump in annual antipollution costs from $6.2 million this year to $125 million in 1976," Drake said.

This will accelerate the existing trend of small foundry closings.

The older the foundry the more likely it will close because the cost to modernize, mechanize and provide pollution control will be prohibitive, he added.

"Air pollution equipment in the gray iron foundry industry alone will cost $317 million, in addition to the annual operation and maintenance cost of $108 million," the BDC director continued. "Given these pollution abatement requirements the scale of justice is not weighted in favor of the foundry industry. . ."

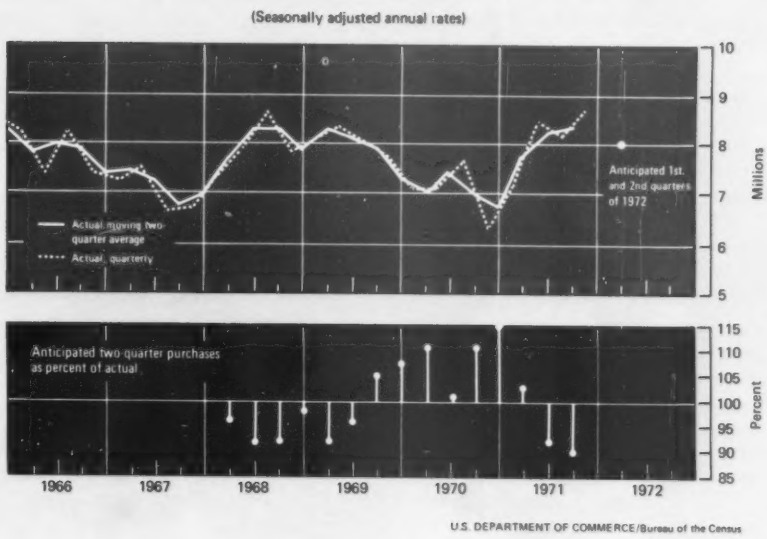
Drake said further that the foundry industry is "experiencing a strange set of circumstances which is puzzling enough without pollution control costs." These circumstances are:

- It has made such strong gains in technology that it is the leading producer of superhard, exotic alloy products in great demand by industry and defense.
- Many companies, particularly independent jobbers, have difficulty in raising sufficient capital to modernize and mechanize.
- The industry business is expanding. Ferrous foundry shipments will reach 22 million tons and $8 billion by 1980—from an expected 18 million tons and $5.3 billion this year—yet this decade may end with about 650 fewer firms than existed in 1970.
- It is an industry which trails the remainder of U.S. manufacturing in productivity, the key element in business growth and stability.

"Zero growth means a slow death for us all," Drake asserted. "Growth through research is a time-tested technique to progress and enrich the lives of people."

Although further growth in the industry's business will be achieved with fewer firms, Drake said Commerce's economic analysts are optimistic about the future of the foundry business, sixth largest U.S. manufacturing industry, and its major customers.

—Bureau of Domestic Commerce



Consumers Planning To Spend More $$$$

Consumer plans to buy new houses were higher in April than in January, but anticipated purchases of new cars remained virtually unchanged, according to new Census figures.

Census summary

In a summary of the results of the latest quarterly Survey of Consumer Buying Expectations, the Census Bureau reported that approximately 12,500 households were included in the survey.

The latest seasonally adjusted index of expected housing purchases was 110.4, an increase over the January 98.9 index. The indexes measure the level of household buying plans relative to the base period of January-April 1967.

Percentages of households reporting either income increases or income declines did not change significantly from the January figure. In April, the percentages of households reporting that their current income was higher than a year ago was 35.7 percent and the percentage reporting declines was 12.5. In January, 35.2 percent of all households reported income increases and 12.7 percent reported declines.

The seasonally adjusted percentage expected to make major home improvements was 8.6 percent, compared to the January figure of 8.2 percent. *—Census Bureau*

Ombudsman For Business

Businessmen who need assistance in their dealings with the Federal Government now have a central office in Washington, D.C., to write or call for information, suggestions, or even for registering complaints—the Commerce Department Ombudsman for Business.

All inquiries should be addressed to the Ombudsman, Thomas E. Drumm, Jr., Special Assistant to the Secretary, U.S. Department of Commerce, Washington, D.C. 20230, or call 202-967-3178.

HOME TO JOBS—*Veterans sing about home as they await return to the United States and the civilian job market. They may receive on-the-job training through a special Veterans Administration program (story on Page 11) or extra help through the mandatory listing program established by Executive Order last fall.*

Firms Employing 500 Or More Asked To List Job Openings For Veterans

A major drive has been kicked off to provide returning veterans with numerous job opportunities through the full implementation of a Presidential Executive Order.

The Executive Order, issued by President Nixon last fall as part of the Six-Point Jobs for Veterans Program to place unemployed Viet-Nam-era veterans on employment roles, requires Federal contractors and first-tier subcontractors to list their job openings with appropriate offices of the Federal-State Employment Service System.

To add impetus to this Order, Labor Secretary J. D. Hodgson has sent a memorandum to the heads of all such departments and agencies, reaffirming the President's concern that the full resources of the Federal procurement process be employed to assist returning servicemen find jobs.

Federal contractors, however, are not required to list their job openings if their government contracts or subcontracts is for an amount less than $10,000, or if the contract will generate less than 400 man-days of employment (said man-day being defined as any day when an employee puts in more than one hour work).

Still no system

And, even with each Federal contract requiring listing of job openings with the state employment service, no way had yet been devised to be sure the new regulation was being followed to the letter.

As a result, a meeting was called of all the agencies involved with Federal procurement. Ideas and recommendations were called for not only to insure compliance with the mandatory job listings, but also to promote ways in which businesses not required to list their jobs might do so, in order to provide more possible job openings for returning servicemen.

George Merlino, Director of the Commerce Department's Procurement Division, noted that his office endorsed this kind of action.

Full cooperation

"We are only too pleased to participate in any program designed to reduce unemployment among our returning veterans," he said.

In fact, Merlino's staff prepared several worthwhile recommendations for monitoring the program and guaranteeing more job opening listing with the Employment Service offices. Many of these recommendation were incorporated in the actions put forth in the latest memo from Secretary Hodgson.

In his memo, Hodgson instructed state and local public employment offices to immediately contact by letter every firm in their area with 500 or more employees. He also requested that 10 days after these letters have been sent the agencies personally contact these firms, to obtain cooperation in this program.

Voluntary request

The Labor Secretary added further importance to the directive, calling upon all firms with 500 or more employees—*whether or not they have a contract with the Federal Government*—to list their job openings with their state employment offices, thereby joining the campaign to find work for the returning men and women.

These voluntary actions on the part of industry would strengthen Executive Order 11598, which requires mandatory listings by all firms with Government contracts of job openings up to $18,000, per year with the Employment Service.

Both actions have been endorsed by President Nixon, who said, "We are all aware that these veterans constitute premium manpower."

He added that "beyond that, they have given a part of their lives in

service to us, and the least we can do is give them every opportunity to find the place they deserve in our economic system. We have not only a moral obligation toward them, but also an economic need to realize the potential productivity they offer."

The current action is two-pronged:

- To bring about a discussion and review of the requirements of the President's Order with government contracting firms, and industry's progress in meeting its requirements.
- To induce other companies, not affected by the Order, to share in the national responsibility for helping the returning servicemen to reenter the economic mainstream.

State and local Employment Service managers, in their letters to business firms, are emphasizing that industry and business' help in meeting this challenge is vital. The letters point out that the listing of job openings with the State Employment Service is mutually beneficial to employers and veterans.

The effort being initiated by the Labor Department represents the teamwork of Federal agencies.

Latest figures from the National Jobs for Veterans Program show that 4.1 million Viet-Nam-era veterans 20 to 29 years old (seasonally adjusted) were in the labor force in March. Of these about 3,800,000 held jobs, but another 300,000 were looking for work.

"We need the cooperation of the private sector," Secretary Hodgson said, "if we are to find jobs for these unemployed veterans.

—National Job For Veterans Program

Note For Federal Contractors

Executive Order 11598, which became effective Sept. 24, 1971, requires Federal contractors and first-tier subcontractors to list job openings with the United States Employment Service.

The primary purpose of this Executive Order is to expand the job opportunities that the Employment Service can make available to Viet-Nam-era veterans.

Business firms that are affected by this directive can make a significant contribution to the Jobs for Veterans Program through voluntary support and implementation of the order's specifications.

Full details of the Executive Order can be obtained by contacting the nearest Employment Service or Regional Manpower Administration office.

IN SERVICE TRAINING—*Many veterans receive valuable job training while in military service. At left Sgt. Bertil Carlson Jr. is being taught to operate an electronic accounting machine by Mrs. Faye Watson, civilian instructor at the U.S. Army Education Center, Ft. Knox, Ky. At right an unidentified meteorologist checks "read-out" on Automatic Weather Data Gathering Center at Ft. Lee, Va.*

Urban America Still Growing— Biggest Market

Urban America is where the marketplace is and the market is growing, according to latest census figures.

Persons vs. land

Nearly three quarters of the country's inhabitants were living on 1.5 percent of the Nation's land area on Census Day, April 1, 1970.

Computation of the urban population by the Census Bureau is based on the 1970 census count. At that time, 73.5 percent of the population was living on 1.53 percent of the land.

The 1970 urban population was 149.3 million of the 203.2 million persons counted, a sharp increase over the 125.3 million urban residents counted in 1960.

The urban area increased by 13,865 square miles, or 34.5 percent during the 1960-70 decade, while the number of urban dwellers grew by 24 million or 19.2 percent.

Total land area of the U. S. is 3,536,855 square miles. Urban Americans occupied 54,103 square miles in 1970, an area roughly the size of Florida. In 1960, the urban area totaled 40,238 square miles.

Urbanized areas are cities of 50,000 or more population and their built-up suburbs. The urban population also includes persons outside urbanized areas, who live in places of 2,500 inhabitants or more.

—Census Bureau

Key Economists Advise Agency On National Priorities

Ten new appointees joined the Commerce Department's Economic Advisory Board in April as the panel met to discuss several aspects of international policy and the domestic economic outlook.

The group, chaired by Assistant Secretary for Economic Affairs Harold C. Passer, is composed of outstanding business and academic economists. It provides guidance to Secretary Peterson on a broad range of economic issues.

The board discussed U.S. trade problems and policies, tourism and the U.S. balance of payments, multinational corporations, and the current U.S. economic outlook.

ADVISORS — *The Commerce Department's Economic Advisory Committee (above) breaks for lunch during day long meeting. At left Dr. Thomas Moore, Michigan State University (far left), and Robert F. Mathieson of Scudder, Stevens & Clark, new committee members, chat with Commerce Secretary Peterson.*

The new members are: Virginia A. Dwyer, Chief Economist & Dir. of Accntg. Res., Western Electric Company, Inc., New York City; Dr. Weston E. Edwards, President, TI Home Transfer Service Corporation, White Plains, New York; James W. Hanson, Chief Economist, Standard Oil Company (N.J.), New York City; Dr. Saul B. Klaman, Vice President-Economist, National Association of Mutual Savings Banks, New York City; Robert F. Mathieson, Vice President-Economics, Scudder, Stevens & Clark, New York City. Also, Dr. Thomas Moore, Professor of Economics, Michigan State University, East Lansing; George Cline Smith, Chairman and Chief Executive, MacKay-Shields Economics, Inc., New York City; Dr. Arthur Wallace, Economist, Andresen and Company, New York City; Robert Keeton, Manager, Economic Research Department, Proctor & Gamble Company, Cincinnati, O.; David L. Williams, Director of Planning, Cleveland Twist Drill Company, Cleveland, O.

Other members are: Eleanor S. Daniel, Director of Economic Research, The Mutual Life Insurance Company of New York, New York City; John V. Deaver, Corporate Economist, Ford Motor Company, Dearborn, Mich.; Alan Greenspan, President, Townsend Greenspan & Company, New York City; Frank E. Highton, Manager, Labor Economics Research, General Electric Company, New York City; George W. James, Vice President-Economist, Air Transport Association of America, Washington, D.C.

Fred Blackwell Renwick, Associate Professor of Finance, Graduate School of Business Administration, New York University, Norman Robertson, Vice President and Economist, Mellon National Bank & Trust Company, Pittsburgh, Pennsylvania; Martin Schnitzer, Professor of Finance, Virginia Polytechnic Institute, Blacksburg, Virginia; James A. Vais, Director of Corporate, Economic and Marketing Research, Kaiser Aluminum & Chemical Corporation, Oakland, California.

Top Maritime Nations Called On To Examine International Shipping

Asserting that the present is a "period of aggressive nationalism in the shipping world," A. E. Gibson, Assistant Secretary of Commerce for Maritime Affairs, has called on major maritime nations to recognize this fact and seek to adapt themselves to it.

Nationalism trend

"Whether we may approve or not," said Gibson, "this trend (toward nationalism) is becoming well defined and must be dealt with."

"The desire of the developing nations to create and maintain merchant fleets under their own flag is a natural one and not about to diminish," he continued. "A national-flag merchant marine is a source of patriotic pride for these nations and a symbol of their developing nationhood. These are all powerful stimulants."

Without the financial resources and sophisticated methods available to more developed nations desiring to promote their merchant fleets, the emerging countries have had to resort to government regulations reserving a portion of their trade for national-flag ships, Gibson said, adding that some 30 nations pursue flag-discrimination policies of one type or another today.

"To date I know of no realistic way of maintaining open access to trade in the face of a nation's insistence on reserving a portion of it for its own fleet," he continued.

The U. S. has long supported freedom of the seas, the Maritime Administrator asserted. Bilateral agreements have been recognized as a departure from the principles that have characterized our international trade relations.

He said U. S. policy always has been that we support the maximum freedom possible in trade and shipping consistent with our national security requirements.

As interpreted by past Administrations, this has had unfortunate consequences for American ship operators, Gibson continued.

Caught between the demands by many trading partners for bilateral division of their trade and the U. S. government's insistence on free access to it, the American shipowner was left in the middle—with empty rhetoric on one side and empty ships on the other.

With both sides' recognition of basic conditions, Gibson expressed the hope that a firm basis can be laid for the negotiation of equitable agreements leading to a fair participation by the ships of the trading nations, and at the same time maintaining a position for "third flag" vessels as well.

"But," Gibson concluded "it can only be accomplished if we recognize that the world that gave birth to many of our past shipping policies and theories has long since ceased to exist."

—Maritime Administration

Calendar For Businessmen

May 22—New York—Observance of National Maritime Day. Helen D. Bentley, chairman, Federal Maritime Commission, will speak at Battery Park, New York.

May 22—Wichita, Kansas—Business Opportunity and Federal Procurement Conference. For information, James Clancey, Wichita Civic Cultural Center, Century II, 225 West Douglas, Wichita, Kansas, 67202.

May 31—Des Plaines, Ill.—Economic Forum, sponsored by the First National Bank of Des Plaines. Robert A. Podesta, Assistant Secretary of Commerce for Economic Development, will speak. For information, William R. Kinnaird, 312-827-4411.

June 11-12—Vancouver, British Columbia—Pacific Northwest Industrial Development Council annual conference. For information, L. D. Thompson, Port of Portland, Oregon, 503-233-8331.

June 11-16—Rochester, N.Y.—Basic Industrial Development Course, accredited by AIDC, at Rochester Institute of Technology. For information, Robert J. Hall, Rochester Gas & Electric, 716-546-2700.

June 26-27—New York—First Annual Government Data Systems Conference, sponsored by the New York City University, Division of Business and Management. Registration accepted by telephone, William A. Kulok, 212-687-8540.

Dollars For Home Property Improvements On Increase

Money spent for upkeep and improvement of residential properties in 1971 increased by 10 percent over 1970, according to the Census Bureau.

Total expenditures for residential additions, alterations and maintenance in 1971 were estimated at $16.3 billion, the Census Bureau reported. This includes $11.2 billion spent by owner occupants of properties containing one to four housing units, and $5.1 billion spent on rental properties.

Expenditures on additions, alterations and major replacements amounted to $9.9 billion. Maintenance and repairs were $6.4 billion. Painting accounted for 42 percent of all maintenance and repairs.

Owner occupants of one housing unit properties spent $2.9 billion for maintenance and repairs and $7.4 billion for additions, alterations and major replacements.

—Census Bureau

SCIENCE & TECHNOLOGY REPORT

- Storm warning devices may help business
- PCB law proposed to limit use, import
- Flash-flood warning systems installed
- Scientists probe earth fault creep
- Patents of special interest

Storm Warning Devices May Help Business

During the current spring season, when tornado occurrences are at the peak, a wide variety of activity is under way to reduce the human tragedy, disaster and the total disruption to business and social life that befall communities unlucky enough to be smashed by this most violent of all storms. Efforts are being made to improve tornado detection systems, so that warnings can be quicker and better, and to increase scientific knowledge of the tornado, of why and how it happens.

In the background, meanwhile, studies are being made that hopefully at some future time may lead to effective means of moderating the atmospheric conditions that spawn tornadoes, and possibly preventing their formation. That time assuredly is not now, and whether it will ever arrive is not known.

For the 1972 tornado season, something new has been introduced that offers the prospect of improving tornado detection when used in conjunction with other methods. New portable electronic detectors developed by scientists of Commerce's National Oceanic and Atmospheric Administration (NOAA) have been placed in 15 sites in 10 tornado-prone States to monitor tornadoes. This is an experimental project designed to determine how well this new device will work.

Site locations

The site locations are: Norman, Stillwater, Ardmore, and Leonard in Oklahoma; Columbia, Cape Girardeau, and Springfield in Missouri; Winfield and Lawrence in Kansas; Searcy and Fort Smith in Arkansas; Vicksburg and Oxford in Mississippi; Shreveport in Louisiana; Richardson in Texas.

Sites were selected for their proximity to radar observations of a National Weather Service radar station. Ideally, a space of 30 miles between the radar station and the electronic recorder should provide good radar views, free of ground clutter, of any storms triggering the receiving device.

"The new monitoring equipment," says Dr. William L. Taylor, project leader with NOAA's Wave Propagation Laboratory at Boulder, Colo., "will enable us this spring and summer to spread our tornadic research over a wide geographic area. This will greatly increase not only the probability of successful tornado observations but also the statistical accuracy of our results. Clearly, results from many

storms are more significant than those from only a few storms, and given the capriciousness of tornadoes, operation at only one or two sites would have been a considerable limitation."

After the tornado season reaches its peak in the South, Dr. Taylor explains, some of the electronic detectors may be moved into the upper Midwest. The possible site locations will be Ames, Iowa; Salem and Springfield, Ill.; and Lincoln, Nebr.

Peculiar differences

Dr. Taylor says that, on the basis of observations made over the last two years at Norman, Oklahoma, the primary scene of tornado research, it was decided that the peculiar differences in tornadoes in different locations should be observed, not merely in what is known as "Tornado Alley," but in areas to the East, where the longer track and worst tornadoes usually occur. "Tornado Alley" is described as the region extending from North Central Texas, on through Okla. and Kans., veering off to the East at the Iowa border.

East of "Tornado Alley" the incidence of tornadoes drops off gradually, although there is some activity in Florida and along the Gulf Coast. West of "Tornado Alley" the occurrence of these storms drops off rapidly, and comes down to almost zero about 100 miles east of the Continental Divide.

Research by the National Severe Storms Laboratory at Norman, Taylor explains, indicates that most tornadoes occur "with what seems to be a distinctive electrical signature that becomes easier to identify as the storm increases in severity."

The picture that emerged from NOAA's work indicates that electrical activity associated with tornadoes generally has three stages. The first stage consists of radio emanations mingled with occasional high-rate bursts produced by separate lightning discharges. The second stage is almost continuous high-rate electricity bursts with little or no isolated bursts. The third stage is a slow return to a low-rate burst level with occasional isolated bursts.

ROAR OF A FREIGHT—*"Like a freight train roaring down the track," witnesses have described the sound of an oncoming tornado. Many different areas of the nation are struck each year by these devastating storms. Scientists are using new techniques to detect the special characteristics that distinguish such storms in order to be better able to predict their coming and one day perhaps to minimize their power.*

"We found," Dr. Taylor says, "that the most reliable indicator of a tornado was the rapidity of the electrical burst or discharge rate. If the burst rate reached 20 or 30 a minute, we discovered that we might have a tornado on our hands.

"One thing we have to be careful about is that tornadoes do not always produce electrical activity. About 20 percent of the smaller tornadoes will be in this class, and a lesser percentage of the larger tornadoes. Some thunderstorms that do not develop tornadoes have a high electrical activity. Thus the electronic detector will have to be used in conjunction with other methods of detection.

"This season's tornado research should answer a few more questions about the association of electromagnetic activity and tornadoes. The numerous eye-witness reports of unusual atmospheric electricity accompanying tornadoes range from observations of circular patches of flashing pale blue light to balls of fire, incessant lightning, and lightning clouds.

Enhancing understanding

"Continued data and documentation on these tornado-associated events will certainly enhance our understanding of the meteorological processes that cause these relatively small but highly destructive storms which can concentrate energy equivalent to 100 million kilowatts in an area only a few hundred yards wide. And, with increased understanding, we hope to provide the research basis for improved services in forecast and warnings."

If the electronic detector works out as NOAA scientists hope, Dr. Taylor explains, it will offer certain distinct advantages. One is the possibility of detecting an approaching tornado at night, when it cannot be seen. Another is the prospect of spotting a developing tornado before the funnel cloud has formed, thereby affording a greater advance warning.

"It lends itself to automatic alarms," he says, "and may eliminate many false alarms."

Determining reliability

In any case, Taylor and his associates are going to see how the electronic detector works during the current year and compare the records they obtain with other records to determine how reliable it has been.

Meanwhile, other research on the tornado is in progress in the vicinity of Norman, Okla. This includes two types of radar, the standard weather radar used by the Weather Service and Doppler radar, aircraft, photographs of storms, a network of ground instruments to record air temperature, pressure, wind direction and speed, rainfall, and amount of moisture in the air, radiosonde balloons to obtain readings in the upper atmosphere surrounding a storm, and instruments placed on a 1,500-foot TV tower operated by Station WKY near Oklahoma City.

The Doppler radar, introduced in the research work last year, offers special advantages in tornado detection. Two Doppler radar are being used so that adequate readings may be obtained. The Doppler system is similar to that employed by police to record the speed of autos. But one Doppler does not give all the necessary information.

"Even though it is still in the developmental stage," says Dr. Edwin Kessler, Director of the National Severe Storms Laboratory at Norman, "we know that there is no substitute for Doppler radar in meteorological studies of precipitating weather systems, especially tornadic storms. The Doppler radar system developed at NSSL (National Severe Storms Laboratory) tells us what's going on, where, inside a storm. It observes and records the internal storm circulation, and if there's no circulation, there's no tornado."

This capability of the Doppler was demonstrated dramatically on June 2, 1971, when laboratory scientists had the opportunity to watch a developing tornado that started moving through central Oklahoma. The Doppler radar recorded a vortex aloft 40 minutes before a funnel cloud formed.

Scientists agree that a tornado may properly be described as a "detail" of a severe thunderstorm. But why one thunderstorm produces a tornado and another does not is not clearly understood. Apparently the meteorological conditions have to be just right for a tornado to form, and if the conditions change before a tornado develops it does not occur. In time the wide range of research under way may throw more light on this as well as many other unanswered questions.

Peak months

Tornadoes occur more frequently in the United States than in any other place on earth. Although they may occur in any month of the year, the peak months are April, May and June. Over a span of recent years, they have killed an average of about 125 persons a year and have caused property

STORM RADAR—*This is a 30-foot diameter antenna unit of the Doppler radar operating at Norman, Okla., which helps determine the nature of a developing storm, observing and recording its internal circulation and taking some of the guesswork out of tornado detection. Two Dopplers are being used so that adequate readings can be obtained. The system is similar to police radar used to catch speeders.*

damage amounting to $75 to $100 million. However, on Palm Sunday, April 11, 1965, 37 tornadoes struck the Midwest killing 271 persons and destroying property valued at $300 million. From 1953 through 1969, an average of 642 tornadoes occurred a year in the Nation. But the damage and destruction usually are caused by only one or two percent of the total number. On the average, they sweep a path only a quarter of a mile wide and seldom travel more than 16 miles. Yet some tornadoes have ravaged a path more than a mile wide and 300 miles long.

Obviously, tornadoes would be reduced or prevented if their parent thunderstorms were greatly modified or eliminated. A variety of ideas have been advanced for preventing tornadoes or rendering them relatively harmless. One of these is cloud-seeding. But it appears that several more years of research will be necessary before it can be determined whether cloud-seeding will help or harm.—*NOAA*

White, Wakelin To Address Marine Technology Workshop

Dr Robert M. White, Administrator of Commerce's National Oceanic and Atmospheric Administration, and Dr. James H. Wakelin, Jr., Assistant Secretary of Commerce for Science and Technology, will address a Marine Technology Society conference and workshop scheduled May 15-17.

Sponsored by the Marine Technology Society, the conference is being held at the Arlington, Va., Crystal City Marriott Motel.

Main objective is to provide an insight into possible technological breakthroughs in developing marine resources for man's use, and an understanding of how society will go about evaluating their impact.

Additional information is available from the Marine Technology Society, 1730 M St., N.W., Washington, D.C. 20036. —*NOAA*

PCB Family Of Chemicals Found Presenting A Threat To Man; Law Proposed To Limit Use, Import

Still another family of chemicals, that have been in widespread use for the past 40 years, has been found potentially harmful to man and his environment. A Federal task force reports that there are "many unanswered questions" concerning polychlorinated biphenyls (PCBs), but "so far as is now known, these adverse effects will not occur as a result of the levels of PCBs currently in the environment."

During the past three years evidence has accumulated to indicate that PCBs are widely dispersed throughout the environment and that they can have adverse ecological and toxicological effects.

The principal uses for PCB fluids are in the electrical industry. PCBs have superior cooling, insulating, and dielectric properties and hence are widely used in various electrical devices. PCBs also give electrical equipment the critical advantages of reliability, long life, and compactness. PCB impregnated capacitors, for example, are markedly more reliable and long-lived, and one-sixth the size, one-fifth the weight, and one-quarter the cost of comparable oil impregnated capacitors.

Surveillance increased

A large use of PCBs had been in carbonless duplicating paper. This use has been discontinued. The Food and Drug Administration and the food industry have increased their surveillance to assure that PCBs are not used in food plants, products, or packaging. A significant source of food contamination has been the recycling of paper, including carbonless "carbon" paper, into the production of new paperboard for food packaging.

There currently are no toxicological or ecological data available to indicate that PCBs constitute a threat to human health except for discrete, high-level exposures, but additional experiments are underway to evaluate the impact of low level, long-term exposure to PCBs.

PCBs have been used so widely over such a long period that they are ubiquitous. Even a total cessation of manufacturing and use of PCBs would not result in the rapid disappearance of the material, and ultimate disappearance from the environment will take many years.

Accidental release

The chief task force recommendations and findings included:

- High levels of PCBs have occurred in food as a result of accidental release of the substance, but steps taken by the Food and Drug Administration and the Department of Agriculture are adequate to minimize such accidents.
- All uses of PCBs that are not essential should be discontinued, and to the extent that they must be used great care should be taken to prevent release of the substances to the environment.
- The use of PCBs should not be banned entirely. Their use in electrical devices, particularly transformers and capacitors, is essential to prevent a greatly increased likelihood of fire and explosion and does not significantly contribute to environmental contamination.
- The major gap in the regulatory system to deal with PCBs is the absence of any broad Federal authority to restrict use or distribution, to control imports, and to collect information. Such authority would be provided by the Administration's Toxic Substances

RECYCLED PAPER SOURCE—*Significant source of PCB food contamination has been paperboard for food packaging produced from recycled paper including carbonless "carbon" paper. However, use of PCB in carbon paper has been discontinued and the Food and Drug Administration and the food industry have increased their surveillance to assure that the chemical is not used in food plants, products or packaging.*

Control Act, now pending before Congress.

• The Monsanto Co., the sole U.S. producer of PCBs, has reportedly taken a number of voluntary actions, including discontinuing sales of PCBs for use in open-system and non-electrical applications for which suitable substitutes are available.

• PCBs are widely manufactured in Japan, Italy, France, West Germany, and Russia, and possibly in Brazil, Argentina, India, United Kingdom, and East Germany. Many electrical products imported from those or other countries into the United States may use PCBs. Presently there is no way to monitor this supply unless the Toxic Substances Control Act or similar legislation is enacted. Until then, buyers of electrical equipment are cautioned that they should question their overseas suppliers about the potential presence of PCBs in equipment and consider the substitution of suitable alternative fluids, if such exist.

• The continued use of PCBs for transformers and capacitors is considered prudent by the task force, because of the significantly increased risk of fire and explosion and the disruption of electrical service which would result from a ban on PCB use. Also, continued use of PCBs in transformers and capacitors presents a minimal risk of environmental contamination.

The task force included representatives of the National Bureau of Standards, and NOAA, and the Department of Agriculture, Environmental Protection Agency, National Institute of Environmental Health Sciences, Food and Drug Administration, and the Bureau of Sport Fisheries and Wildlife.

The 192-page report "PCBs and the Environment" is available at $6 from the National Technical Information Service, Springfield, Va. 22151.

Eight Flash-Flood Warning Systems To Be Installed

A number of automatic warning systems are to be installed at various locations throughout the U.S. to alert business and residents affected when fast-rising flood waters from heavy rains threaten.

The first such system has been installed near Wheeling, West Virginia, by the National Weather Service of Commerce's National Oceanic and Atmospheric Administration.

Such systems will help to deal with a problem made clear by Hurricane Camille in 1969, when, on the night of August 19-20, the remnants of that dying storm released 27 inches of rain in about eight hours on the James River Basin of Virginia, drowning 153 people.

The new flash-flood warning system has three main elements linked together by electrical circuitry: a robot water-level sensor at an upstream point on the river; an intermediate station several miles or more downstream to provide electric power to the sensor; and a community-alarm station from which warnings can be spread quickly to the public.

Enclosed float device

The upstream station has an enclosed float device which operates like a bulb in a toilet tank to activate an electric current when a critical water level is reached. This device may be mounted on an appropriate site such as a bridge support. The sensor is connected to a weatherproof box containing a battery, signal transmitter, and associated circuitry. The signal goes from here to the intermediate station, which is located where both electric power and telephone service are available, and finally to an alarm station in a firehouse, police station, or other emergency

SUDDEN RAMPAGE—*A couple of luckless motorists find themselves in trouble at the end of a lifesaving rope after a flash flood engulfs their car. Automatic flash flood warning systems being installed at various river locations are hoped to keep such situations to the minimum. Precious hours or minutes may be provided riverside residents to reach higher ground.*

center manned 24 hours a day, seven days a week.

The alarm itself may consist of a lamp that flashes and/or an audible signal such as a buzzer, bell, or klaxon. When the alarm is triggered, it is the responsibility of community officials and the news media to see that the public is alerted by emergency broadcasts, and perhaps by siren, according to pre-arranged plan.

The Weather Service plans to install seven additional automatic-warning systems for flash floods within the next two years. There already are signed agreements for three such systems in Green Brook, N.J. (near Plainfield); Wayne County, Ohio (near Wooster); and Waynesboro, Va., (the area deluged by Camille). Negotiations are under way for an additional system in West Virginia, and in North and South Carolina and Maine.

When these systems are installed, chances will be reduced for people to be caught totally unaware by a surprise flash flood; valuable hours or minutes may be provided to give streamside residents time to reach high ground.

Camille flooding

An idea of the type of extreme danger being warned against is provided in this description of the Camille flooding in Virginia by climatologist Richard M. DeAngelis, of NOAA's Environmental Data Service, and Elmer R. Nelson, of the Weather Service's Office of Hydrology, not long after the event:

"The torrential rains associated with the remnants of Hurricane Camille caused one of the worst flood disasters ever to strike the state . . .

"Most of the residents of the mountain hollows, hamlets, and towns were asleep during the fatal hours of the storm. Rapidly rising streams and landslides caused by the unprecedented rainfall destroyed homes as the occupants slept. Large trees were uprooted and hurled down the mountains. They acted liked battering rams, crashing through houses, overturning automobiles, sparing nothing in their paths. Entire families were swept away in the raging water. Whole sections of the mountainside slid down in the form of mud, heaping tons of silt on houses and their inhabitants."

Weather Service hydrologists point out that, while sudden flooding of such cataclysmic proportions is extremely rare, events approaching it in severity can and do occur often enough to warrant special vigilance in flood-vulnerable localities. They believe the new automatic warning systems will be valuable and reliable sentries, always at their posts, never asleep.

—*NOAA*

Scientists Probe Earth Fault Creep In California's Earthquake Zones

Scientists at the San Francisco-based Earthquake Mechanism Laboratory of Commerce's National Oceanic and Atmospheric Administration are searching for the meaning and relationship to earthquakes of movements along California's San Andreas fault in general, and a small, slow movement called "fault creep" in particular.

Continuously recording creep meters have been installed on the San Andreas fault near Hollister, Calif., on the Calaveras fault near Hollister, and on the Hayward fault in Hayward and Fremont. The laboratory also measures creep in oil fields such as along the Buena Vista thrust fault near Taft, Calif., and measures the creep that occurs along faults after some earthquakes.

It is believed that these movements may hold important clues to the collisions of gigantic crustal plates in the earth and to the occurrence or dearth of major earthquakes in California's crowded coastal zone.

The San Andreas fault is now viewed in the context of the plate tectonic theory, which holds that a spreading seafloor, constantly replenished by material rising from the earth's mantle through mid-ocean rift zones, drives large crustal plates. Where these floating plates converge, as along the western rim of the Americas, the oceanic plate thrusts under the continental plate. The high level of earthquake activity found in such zones is believed to be caused by stresses built up in the crustal material.

In a series of complex geologic processes begun perhaps 30 million years ago, the eastern rim of a Pacific crustal plate rammed into and under the western rim of the North American plate. Today, the process continues, with the North Pacific plate drifting to the northwest with respect to the continental plate, at rates estimated at between one and three inches per year, depending on the method of measurement. This differential movement produces stresses in portions of the fault that are finally relieved by rock failure and violent earthquakes.

Creep is a non-seismic slip motion. That is, a motion that does not generate seismic vibrations along certain segments of faults in the earth's crust, such as the San Andreas fault system in California. But the creep mechanism is not yet fully understood.

Divided opinion

Among scientists, opinion is divided as to whether creep is a rupture process or a process linked to the deformation of clay material along a fault; however, there is agreement that creep appears to occur in episodes, or "steps" like the larger fault movements associated with earthquakes.

But creep is a slower, gentler process than earthquake-generating fault breaks. A creep event travels at a rate of only several miles per day, compared to the 7,000-mile-per-hour speed of some seismic ruptures. Creep dislocations usually amount to several millimeters over a period of hours or days whereas earthquake-producing fault movement may amount to tens of feet in seconds.

CREEP CHECK—*Dr. Robert D. Nason, in charge of NOAA's field studies of fault creep, checks the offset of a concrete-lined irrigation ditch at the Cienega Winery, where this non-seismic fault movement was first identified.*

The existence of this non-seismic fault motion on California's San Andreas fault was first discovered in 1956 by Edwin Zacher and Karl Steinbrugge, structural engineers, at the Cienega Winery, south of Hollister. The winery straddles the fault zone and is being slowly torn in half by the fault movement.

Cities like Hollister, Calif., show the effect of fault creep in sidewalks, cracked pavement, crooked streets, kinks and bumps in fences, foundations, walls, and other structures, and in land formations.

Present creep movement is occurring along the central San Andreas fault between the two portions of the fault that were broken by the earthquakes of 1857 (to the south) and 1906 (to the north). This pattern suggests to some scientists that the central segment of the San Andreas fault is "unlocked"; and that the fault segments to the north and south, where no creep is now observed, are locked.

Fault creep is almost certainly related to earthquakes, but the details of this relationship are not fully understood. For example, the fault creep rate almost doubled for two years before a significant earthquake near the Cienega Winery, then ceased for two years after the earthquake. And the spatial distribution of current fault creep seems to be closely related to the 1857 and 1906 earthquakes.

Scientists believe that strain, the elastic deformation caused by internal stresses, is relieved by creep. The question is, how much is relieved? —*NOAA*

Patents Of Special Interest

Recent patents issued by the U.S. Patent Office included:

Electronic hood and trunk-locking device. A locking device for an enclosure such as a hood or trunk of an automobile includes a casing having a slidable bolt actuated by a first solenoid and held by a lever in extended position. A second solenoid retracts the lever to permit retraction of the bolt by a spring. A switch in the casing is disposed for operation by the bolt when the bolt is retracted. The first and second solenoids are operable in response to actuation of a key controlled switch and associated electronic circuitry which includes two opposing transistors. The first solenoid is actuated by discharges of a capacitor through one of the transistors when the other transistor is rendered nonconductive. Patent No. 3,643,479 issued to Joseph Solow, P. O. Box 116, Plainview, N.Y.

Apparatus for mowing steep embankments. An apparatus for and a method of mowing vegetation on steep embankments including a tractor-drawn trailer, suitably equipped for transporting a power mower, offloading the mower, and controlling by cable the substantially vertical ascent and descent of the mower while in operation. The trailer derives its power to control the vertical movement of the mower from a tractor. The power mower contains a radio-controlled steering mechanism to provide lateral movement during the substantially vertical cable-controlled mowing operation, which is responsive to electrical signals from a multiple-channel transmitter, normally mounted on the tractor, but capable of being detached and operated away from the tractor. The combined power mowing apparatus comprising a tractor, the powered transporting and control trailer, and a radio-controlled power mower, are utilized in a simplified method of mowing vegetation on steep embankments, where conventional power-operated mowing equipment is unable to traverse steep grades. The combined apparatus can operate on service plateaus either above or below embankments, and is usually controlled by a single tractor driving operator, however, in cases where embankments are out of sight of the tractor operator, the transmitter for controlling the lateral displacement of the power mower may be demounted from the tractor and employed by a second operator who is within view of the tractor operator. Patent No. 3,651,623 issued to Rutherford B. Harley, 4300 Bishop Lake Rd., Marietta, Ga.

Wheel chair ramp for automotive vehicles. This ramp is adapted to be permanently secured to a vehicle. Two stanchions are fixed at the two sides of a door of the vehicle. Two levers, which are pivoted at their lower ends to the stanchions carry a floor section of the ramp. To this section is hinged a second floor section; and to the second floor section is hinged the step plate or lip of the ramp. Fluid-pressure-operated pistons and cables through manually-operated switches open the ramp to swing it down out of the door of the vehicle to a position where a wheel chair patient can roll himself onto the ramp and into or out of the vehicle. When the patient is safely inside or outside the vehicle, he can operate the switches to fold the ramp into the vehicle, and close the door. Patent No. 3,651,965 issued to LeRoy S. Simonelli, East Rochester, N.Y., and assigned to Clover Industries, Inc., North Chili, N.Y.

Abstracts and drawings of patents are published as they are issued in the *Patent Official Gazette* each Tuesday. More than 1,600 patents are issued each week. Trademarks are published in the *Trademark Official Gazette*. Copies of the *Patent Official Gazette* and the *Trademark Official Gazette* may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402.

Science Calendar

June 21-23—Boulder, Colo.—National Bureau of Standards, Boulder Laboratories Joint Measurement Conference. Theme is "The Role and Value of Measurement." Sponsored by National Bureau of Standards.

June 26-29—Boulder, Colo.—National Bureau of Standards. Precision Electromagnetic Measurements. Sponsored by IEEE and URSI.

July 17-21—Milwaukee, Wis.—American Society of Civil Engineers Transportation Engineering Conference. Sheraton-Schroeder Hotel. Conference theme is "Policy Issues In Transportation."

August 9-12—Kailua-Kona, Hawaii—International Symposium on Billfish. Sponsored by National Marine Fisheries Service.

Sept. 20-22—Gaithersburg, Md.—National Bureau of Standards. IEEE-TAP Environmental Conference.

Oct. 2-6—Gaithersburg, Md.—National Bureau of Standards. Third International Congress on Marine Corrosion & Fouling. Sponsored by the Permanent International Commission for Research on Preservation of Materials in the Marine Environment in cooperation with NBS, Maritime Administration, Office of Naval Research, and Naval Oceanographic Office.

Oct. 30-Nov. 1—Gaithersburg, Md.—National Bureau of Standards. "Dimensional Accuracy in Manufacturing." Sponsored by National Bureau of Standards.

Newsmemo

Export assistance by the Foreign Credit Insurance Association is being brought closer to the home offices of U.S. firms. The FCIA is opening new branch service centers across the U.S.--12 is the eventual goal. It has also set up a Washington Liaison Office under the experienced financial and trade specialist Dallas M. Coors. The FCIA, which groups about 50 marine, property and casualty insurance firms together in the service of exporters and cooperates with the Eximbank, has been in business since 1961.

Accept barter deals? Perhaps. Trading with Eastern Europe often means agreeing to such arrangements. They are usually regarded as too cumbersome by U.S. firms. Paul E. Pauly, an official of the Bureau of International Commerce, reporting a busy schedule of Commerce trade promotions in Eastern Europe this spring, says of such deals "In normal circumstances, justification for them is questionable, and the inefficiency of the barter technique should be recognized at the outset. But when we are dealing with countries where for political or other reasons--for example, lack of a trading structure, lack of foreign exchange--we might not be able to pursue our accustomed methods of trade, it is reasonable for us to look at this method."

I.E.A. Presents A New I.D.E.A. to Export Trade. Translation: The International Executives Association has formed a new subgroup for companies interested in the Domestic International Sales Corporation tax incentive. It will be called the International DISC Executive Association. According to the I.E.A., more than 1,000 U.S. exporting companies have already formed DISCs. The new group intends to supply information and help to companies seeking the maximum export assistance from the DISC program.

What was the attraction that led to two sellouts of charter flights in Europe, and the need to use a larger plane for one? Displays of U.S. equipment at Commerce's Trade Centers in Paris and Frankfurt. The flights carried Dutch businessmen scouted by the American Chamber of Commerce in the Netherlands and the U.S. Embassy in the Hague. In compact Europe such trips begin in the morning, allow a full day of discussions with Trade Center exhibitors, and take the visitor home in the early evening hours.

An International Host Committee is now at work in California's East Bay area to greet visitors from abroad. Object: increased foreign trade. The sponsoring Oakland Chamber of Commerce has given the group these duties: develop a roster of host companies and individuals; obtain information about visitors; classify the visitors by business interests; arrange meetings, and coordinate these efforts with other interested groups.

International Trade Winds

MATERIALS HANDLING—Clark Equipment Co., Buchanan, Mich., reports that its overseas subsidiary, Clark Equipment A.G., has entered into a license agreement with Toyo Umpanki Co. Ltd. to build Clark industrial lift trucks in Japan. Production of selected models under the Clark trademark is expected to begin during the first half of 1973. Toyo Umpanki, which is headquartered in Osaka, has been affiliated with Clark since 1957 and produces Clark's "Michigan" line of construction machinery. The lift trucks will be marketed in Japan by Toyo Umpanki and outside of that country by Clark International Marketing S.A., the overseas marketing arm for the Clark Equipment group of companies.

BANKING—Bank of America has opened its fourth French branch. The new unit, in Strasbourg, raises to 12 the number of Bank of America branches in Common Market countries. Other French branches of the San Francisco-based bank are in Paris, Marseille and Lyon.

COMPUTERS — Sperry Rand's Univac Division, Blue Bell, Pa., has received orders for computer systems from two Swedish firms. Coronadata Co., a data processing service bureau headquartered in Gothenburg, has contracted to buy two Univac systems, a 9700 and 9400. Planned for delivery next month, the 9400 will be used for production planning, stock control, investment analysis, purchasing, invoicing, general accounting and payroll processing. The 9700 is scheduled for delivery in 1974. Another concern, Vaxjo Data Services Co., has purchased a Univac 9200 II system.

PAPER—Clupak, Inc., New York, reports that production of its extensible paper has begun at the Pori mill of Oy W. Rosenlew Ab, Clupak's fourth paper licensee in Finland. Clupak extensible paper is a type of kraft paper. The extensible unit used by Rosenlew was manufactured by J. M. Voith A.G. of St. Polten, Austria, one of 17 companies licensed to make and sell this equipment to Clupak's paper licensees.

INTERNATIONAL COMMERCE REPORT

- Washington's Official Trade Briefs
- Results of Oregon mission to Far East
- Canada's new investment regulations
- World Trade Week calendar for exporters
- Worldwide sales and investment opportunities

Export Gains From Dollar Shift Surveyed

In the wake of the December currency realignment, an early survey by U.S. Commercial Officers in countries that account for about four fifths of total U.S. trade shows the following:

► The new lineup of exchange rates in which the dollar is depreciated against the other major trading currencies is producing the promise of a significant boost in U.S. exports, but, as expected, over the long term rather than quickly.

► Possible good gains in the short run are being dampened by the business slowdown in many West European markets and Japan.

► Price cuts made feasible by the dollar devaluation are not always being passed along to the overseas customer.

► The dollar depreciation was found, in many instances, insufficient to close the price gap between U.S. and competing goods.

► Foreign competitors are shaving their prices, not only to meet the U.S. change, but to counter sluggish demands at home.

► Existing trade barriers already restrict U.S. sales in many places. There is concern that new ones, aimed specifically at nullifying the U.S. realignment advantages may be added.

► A few U.S.-owned multinational corporations are reportedly considering a shift in procurement from foreign affiliates in countries whose currencies appreciated to now lower cost U.S.-made goods. Reporting officers indicated, however, that the amount of savings to some parent companies would be too small to warrant diverting production from foreign-based plants.

Machinery and equipment are most frequently mentioned as potentially significant sales gainers because of the currency realignment. These products are principally valves and compressors, metalworking machinery, agricultural machinery, construction equipment, nuclear power equipment, printing machinery, industrial refrigeration and air-conditioning machinery, and electrical measuring instruments.

Among other types of goods that U.S. exporters might be able to sell in greater volume are said to be plastics, construction materials, pulp and paper, specialty steels, and electronic components.

The survey was undertaken in more than two dozen countries at the request of the Commerce Department's Bureau of International Commerce, whose Office of International Commercial Relations analyzed the results, with the assistance of the Office of International Investment.

The comments received from U.S. posts are summarized in country by country form on the following pages.

Europe Asks If Price Rises Will Counter Dollar Drop

U.S. Commercial Officers in 11 Western European nations, all major markets for American goods, report varying patterns of reaction to the December 1971 currency realignment. One item of common concern is this: are U.S. producers determined to take full advantage of the dollar drop by holding their price lines?

Belgian forecast

Belgium: The recent currency realignment came at an inopportune time for U.S. sales in Belgium, according to the U.S. Embassy at Brussels. Because of the slack demand in Belgium's chief export markets (Germany, France and the Netherlands), its own export growth has been retarded. This in turn has restricted the growth potential of Belgian demand for some U.S. products.

Trade association and industry representatives interviewed by Embassy officers indicate that it will be some time before the effects of the realignment turn up in trade statistics.

Furthermore, predicting those effects is complicated by the large share, 60 percent, of imports already supplied by the other EEC countries, in contrast to the 6 to 8 percent supplied by U.S. exporters in recent years. This dominant orientation toward intra-EEC trade is expected to increase considerably with the accession of the United Kingdom, Ireland, Norway, and Denmark to the Common Market. Also complicating a prediction is the possible lowering of the EEC's discriminatory barriers against Japanese products, which would impair U.S. export prospects.

The Embassy has found few instances in which the franc prices paid for U.S. products by Belgian consumers, private or industrial, have been reduced. In most cases, the U.S. exporter has increased his dollar prices by some fraction (or even the full amount) of the 10 percent decreased cost of the dollar in francs, and the remaining fraction has been taken as profits by Belgian importers and distributors.

Nonetheless, where U.S. exporters have lowered their prices in francs, they should be able to compete more effectively in the Belgian market against products from other countries. This should be all the more possible during the next year or two if, as seems probable, the franc prices of U.S. goods do not increase as rapidly as those charged for goods from the Common Market countries.

It should be noted that trading patterns already established between non-U.S. suppliers and Belgian consumers are not easily changed. The currency realignment, however, should enable some American exporters to enter the Belgian market for the first time, and should help current U.S. exporters to increase sales, provided they do not increase their prices to the extent of eliminating their advantage.

Also, according to the representative of a large U.S. multinational chemical corporation, the effects of the dollar depreciation combined with those from the tax incentives to invest in the United States, and the incentives afforded by the DISC program, may now encourage some American multinational firms to establish manufacturing facilities in the United States rather than abroad.

Nevertheless, the Embassy feels that in the longer term opportunities for exports to gain from the realignment may decrease as a result of the increasing production by these firms in Europe.

Sales of Belgian products to the United States (which increased 17.6 percent in 1971) are generally expected in 1972 to return to their 1970 level. The 1971 increase was due in large part to exceptional stockpiling of steel and raw materials by U.S. manufacturers faced with the threat of strikes. In response to the appreciation of the franc against the dollar, Belgian exporters in such sectors as diamonds, textiles and glass have lowered their Belgian franc prices in an effort to remain competitive in the U.S. market. The extent to which this price cutting has occurred corresponds broadly to the relative importance of the U.S. as a market for each industry.

Beneficial effects

Realignment should have a beneficial effect on U.S. exports to Belgium in these fields:

Some agricultural products, including oilseeds and meal, cotton, fresh citrus, and possibly tallow and a variety of fresh meats.

Cranes and road-making equipment, and, in the longer run, industrial refrigeration machinery and parts, water filtration equipment, compressors, road graders, automatic grinding machines, glass-making machinery and cable-making machinery.

Some chemicals, especially those with high technology content, and especially if U.S. producers can hold their prices down to meet West European, U.K. and Japanese competition.

Most of the original U.S. Embassy reports on currency realignment upon which these articles are based will be listed in the May 1972 "Index to Foreign Production and Commercial Reports." Using index listings, readers may obtain these reports by writing to the Export Information and Services Division, Bureau of International Commerce, U.S. Department of Commerce, Washington, D.C. 20230.

Textiles, particularly artificial fibers, are now in a good position to compete against German products. At least one Belgian garment maker who bought half of his materials locally is now buying all of it from the U.S.

Help in Denmark

Denmark: The currency changes appear to provide no further decisive advantages for U.S. sales, which had shown a strong performance in 1971, especially in farm products and machinery and equipment. Nonetheless, gains from the dollar depreciation should ease price problems on some major bulk commodities, and offer somewhat less help to high technology goods, where price is secondary.

Although U.S.-produced machinery sold well in 1971, in 1972 it faces a market weakened by tight money, reduced profit margins, and the delayed effects of a temporary surcharge on imports. These sales are also being impaired by the hesitancy of many investment decisions due to present uncertainty about Danish EEC entry.

Nevertheless, importers of U.S. machinery, including machine tools, expect some improved competitiveness—not only from the realignment but also from the European inflation. These benefits can be jeopardized, however, if U.S. suppliers revise price lists upward as some have already done.

Importers of U.S. electrical and electronic equipment point to specialized categories, such as electrical measuring and testing devices, and special purpose transmitting and receiving equipment, where a definite sales improvement has already occurred.

In chemicals, the gains are now expected to remain small, largely because U.S. suppliers have raised their dollar prices. This has an effect in the Scandinavian market where European surplus production is offered at very favorable prices. In pharmaceuticals, potential gains have been offset by corresponding price reductions by European suppliers. Conversely, in several minor export categories, such as textiles and plywood, prospects for improving the U.S. market shares were forfeited as U.S. export prices in dollars were increased at the same time as the dollar depreciated.

Exchange Rate Advantage

Gained Since May 1, 1971, By U.S. Exports

Competitor country [1]	Percent advantage [2]	Competitor country [1]	Percent advantage [2]
Japan	14.4	Singapore	7.9
West Germany	12.0	United Kingdom	7.9
Switzerland	11.9	Denmark	7.0
Belgium-Luxembourg	10.4	Italy	7.0
Netherlands	10.4	Norway	7.0
Australia	7.9	Sweden	7.0
France	7.9	India	2.9
Hong Kong	7.9	Venezuela	2.2
Spain	7.9	Canada	[3]

[1] Major trading countries whose currencies appreciated relative to the U.S. dollar since May 1, 1971.
[2] Measured by the reduction in cost of the U.S. dollar in terms of the cost of currencies of the indicated countries to importers in the home and third markets, as computed from the par or central value rates for these currencies.
[3] Less than 1 percent.

Outlook in France

France: Extensive soundings of French and American businessmen and trade analyses by U.S. Commercial Officers in France confirm that, on the whole, the exchange rate realignment will be favorable in both the short and long-run for U.S. exports to the French market. Although no dramatic increase in U.S. shipments to France is expected in 1972 (largely due to somewhat slower French economic growth than in 1971), the outlook for the 1973-1975 period is more promising. However, the ability of U.S. exporters to hold the price line will largely determine the extent of their gains.

Major products with substantially improved competitive positions include: chemicals and plastics, specialized production machinery, agricultural machinery, electronics components, small computers, instrumentation, telecommunications equipment, airborne electronic equipment, specialized building materials and construction equipment, and institutional food preparation and serving equipment. Short and long-term improvements are expected in all of these categories, with the possible exceptions of certain chemicals and electronic components where demand is currently soft and the effects of the price advantage gained by the U.S. may not appear until after 1972. A similar delay is anticipated in the case of capital goods requiring long lead times between order and delivery.

In general, the position of U.S. companies is felt to be markedly strengthened in competition for major industrial or other construction projects in France, such as those involving an ethylene pipeline, nuclear power stations, a paper pulp plant, an automobile plant, and the port and steel complex at Fos near Marseilles.

The U.S. should benefit in sales of farm products which are not subject to the Common Agricultural Policy of the EEC: soybeans, soybean meal, citrus fruit, cotton, and certain varieties of meats.

The depreciation of the U.S.

dollar relative to the German mark was substantial, and Germany is currently supplying close to one fourth of total French imports, compared with the U.S. share of 8.5 percent in 1971. In many import categories the United States is running second or reasonably close to Germany as the principal supplier. The relatively good U.S. market position in France combined with the exchange rate advantage should permit U.S. exporters to compete more effectively against German imports, particularly in organic and some other chemicals, plastic materials, paper and paper manufactures, non-electrical machinery and appliances, electrical machinery and equipment, and instruments.

Nevertheless, in recent years the United States has not done as well as Germany in competing for sales of some price-sensitive products within these categories; for example, machine tools, certain industrial chemicals, machinery for plastics extrusion, and food processing and packaging machinery. Where price differences between U.S. goods and those of France or Germany or other suppliers have been substantial, or where U.S. prices have been rising, the recent exchange rate changes may do no more than stop the decline in U.S. sales. For U.S. products priced fairly close to those of the competition, however, their quality may influence the decisions of some French buyers to buy the U.S. products.

Some gains in Germany

Germany: Based on preliminary surveys, roughly 20 percent of total U. S. exports to Germany will benefit directly in 1972 from the currency realignment. For most of these products, the dollar depreciation will make possible sales increases; in other cases, it will merely forestall sales losses that might otherwise have occurred. The remaining 80 percent of the U.S. exports to Germany will probably not be affected one way or the other—either because the U. S. price is already too high for even the full 12 percent exchange rate reduction to have much effect, or price is not a major factor.

Prices are cut

U. S. exports which now appear to show prospects of increased sales because of lower Deutschemark prices include pumps, valves and compressors; wood pulp; paper and paper products; marine control valves; ship main turbines; pleasure craft; mobile homes; and certain woven fabrics. Products which should now be able to stave off sales losses, at least in the short run, include construction materials and oil seeds and meal.

Between April and December 1971, German prices for imported pumps, valves and compressors from the United States declined by more than the prices of these goods imported from other countries. Thus, the U.S. share of this $250 million market should go up in 1972, with the annual growth rate of U.S. sales averaging around 20 percent thereafter. Chemical and plastic products and wood pulp should also increase, although these goods also face decelerating demand due to the current economic slowdown in Germany. Prices for chemical and plastic imports, as a whole, dropped 3 percent between April and December, while domestic prices were rising marginally. Similarly, import prices for wood pulp were down 9.4 percent during this period, while domestic prices fell by only 2 percent.

Several products in the shipbuilding supplies and components area have also improved their competitive position for 1972. Prices of ship main turbines, in particular, have evidently fallen by some 10 percent, and marine control valves and equipment, which were 30 percent more expensive than competing lines, are now only 10 percent above other prices. However, U. S. sales may be limited in the longer run because German shipbuilders face the prospect of decreasing activity due to the appreciation of the mark.

Total sales of paper products will be held down by stagnant German demand in 1972. U. S. paper and paper products will probably gain after 1972 from the realignment, although rising U. S. prices will nullify some of the benefit. For example, the price of U. S. kraft liner in marks declined only by 3 percent between April 1971 and January 1972 because of an 11 percent increase in dollar prices.

The effect of realignment on the construction materials and equipment sector (some $58 million worth of U. S. exports) has been mainly to limit losses which might otherwise have taken place. Prices in marks have dropped principally in those product areas facing strong domestic competition, such as lumber.

Most will not be affected

As indicated, by far the largest portion of U.S. exports to Germany will not be affected one way or the other by the realignment. In the case of tobacco, steel, aluminum, and some machine tools and plastics processing equipment, for example, the existing price differentials between U.S. and competing products are simply too large to benefit from the 12 percent U.S. depreciation in terms of the mark. In addition, U.S. sales in agricultural products (grains, feeds, meat and poultry), face stagnation this year and beyond due to EEC trade restrictions.

Another important segment of U.S. exports will be impaired, at least in the short run, by the German economic slowdown. An estimated 60 percent of total U.S. non-defense exports comprise industrial materials and equipment that will be especially handicapped by the anticipated 7 percent decline in real investment this year.

SHOWING A U.S. PRODUCT IN GERMANY—*For some U.S. exports, technology is more important than price. This was the case for many products shown at a Pollution Control Equipment Show, above, at the U.S. Trade Center in Frankfurt in March.*

Even in the face of the economic slowdown, however, and quite independently of the currency realignment, a good portion of U.S. exports in this industrial products category should show substantial gains in 1972. These include business machines, aerospace and electronic components, advanced electrical equipment and passenger aircraft (comprising 25 percent of total U.S. exports), which, because of technological superiority or other factors, already dominate the market and face little or no domestic or third-country competition.

Also expected to do well in 1972 and thereafter, without regard to the realignment, are photochemicals, air conditioning and heating equipment, textile machinery, optical and precision instruments, laboratory testing equipment, nuclear products, automotive parts and measuring instruments and controls.

The impact of the currency realignment on German exports to the U.S. is not yet clear. On the whole, German exports will probably continue to increase, though at a lesser rate than in the past. German exporters can be expected in the short run to reduce prices and profit margins to offset the realignment effect, in order to hold on to their U.S. market share. German products that will continue to do well despite the realignment include automobiles, and electrical and chemical products. Nevertheless, those from the machine building, steel, glass and beer industries will be relatively harder hit.

The German Government has taken no steps to offset the effects of the realignment other than those already provided for under the variable levies system of the Common Agricultural Policy of the EEC.

Italian situation clouded

Italy: The consensus of 60 businessmen and government officials interviewed by the U.S. Embassy in Rome and elsewhere is that Italian economic and political conditions and the unsettled international situation cloud any forecasts on the effects of the currency realignment on Italian imports. Many emphasized that lagging production and investments could restrain imports of raw materials and capital goods, which are major U.S. goods sold in Italy.

Italian imports from both the United States and the EEC in 1972 will heed the rate of recovery of the country's stagnant economy. This recovery in turn depends importantly on the restoration of investor confidence which is hindered by the political situation and major wage negotiations looming this autumn. Some economic indicators are improving, and authorities state the volume of total imports could rise by 8 percent in 1972.

Price cuts give leverage

Most observers now believe the currency realignment can improve the competitiveness of U.S. exports in the Italian market if dollar prices hold steady. Although there has been little visible effect thus far, the new currency rate gives U.S. suppliers potential bargaining leverage, particularly for U.S. goods that were previously priced no more than 15 percent above those of competitors. Price sensitivity of some products is already kindling buyer interest in U.S. sources. For example, there are cautious predictions U.S. competitiveness will improve in pumps, valves, compressors, pollution control equipment, optical equipment, some plastics and chemicals (not pharmaceuticals), wood pulp and possibly coal. A significant shift is reported toward some U.S. electronic components and automated assembly line equipment.

There is little apparent effect on advanced technology items such as data processing equipment, where the U.S. is already the leader. Product technology rather than price also dominates decisions to buy other sophisticated products ranging from aircraft to scientific instruments and process controls.

Businessmen report dollar price hikes have nullified the realignment advantage in items such as communications equipment, machine tools, nautical and aircraft instrumentation, and crude and semi-finished steel. While the United States is still selling such products, competition is increasing sharply. Hungry domestic producers and

DUTCH CHECK OUT U.S. GOODS—*The currency shifts will help boost sales of many U.S. products shown at the Shipbuilding & Port Facilities Show in Amsterdam.*

third-country exporters are reportedly paring margins and getting direct intercession by their governments in large transactions. While the realignment affords U.S. companies the greatest gain over German competition, Italy appears increasingly to favor EEC suppliers on policy grounds as well as by historical trade patterns. As the EEC expands, some fear the British will confront the United States with serious competition in high technology items.

In the agricultural sector, the realignment may be partially responsible for a temporary spurt in U.S. cotton sales and growing demand for soybeans and meals. U.S. grains, however, are subject to EEC compensatory levies which have annulled the benefits for them from the realignment.

Dutch may buy more

The Netherlands: Realignment effect? Not much this year, but it could become more important in 1973 and in the years following. Some sources do not see any significant impact on the level of investment, domestic consumption or imports. The dollar depreciation, taken together with rising local costs in the Netherlands, will encourage some Dutch manufacturers to invest in the United States rather than at home. No Dutch measures to offset the effects of the realignment are contemplated at this time.

The U.S. Embassy based these assessments on discussions with local traders in 15 key product categories, and, through the American Chamber of Commerce in the Netherlands, with 40 members who trade with the United States.

Guilder prices for most U.S. products have fallen by 3 to 7 percent while those of competitors have been rising, it was learned.

These price changes could eventually result in better U.S. sales, but not until the Netherlands moves to a reflationary policy.

The realignment has had no effect on many U.S. exports because of one, or a combination of, the following reasons—quality is often more important than price; the major competition may only be American; the EEC or Japanese competitive edge still exists, though lessened.

Product groups that should benefit most from the new exchange rate structure include: small and peripheral EDP equipment; pumps, valves, and compressors; steam turbines; and electronic service instruments and machinery.

Some U.S.-made consumer durables could now be competitive in the Netherlands if the U.S. multinational firms supplying these goods can be shown that such sales are now potentially profitable.

Exports of U.S. farm products subject to Common Market restrictions will fail to benefit from the new rates as they are expected to decline because of other factors. In contrast, agricultural goods not so subject, particularly soybeans and corn gluten meal, have been gaining in the Dutch market, and the realignment should give them a further boost. Total sales of nonrestricted items could reach $400 million by 1975. In addition to the exchange rate changes, the other factors affecting Dutch imports of U.S. goods include relative rates of inflation, idle American plant capacity, and the extent to which the DISC is adopted.

The revaluation of the guilder will probably hurt sales of the more price sensitive Dutch exports in the U.S. market, particularly steel, office machinery, diesel engines, electronic equipment and reactor pressure vessels. Canned hams and flower bulbs are not expected to suffer and sales may even rise because of growing demand based on quality.

So far there has been no real concern among Dutch producers over increased American competition with their exports to third countries. Despite this lack of concern, the Embassy believes that Dutch exporters, including U.S. subsidiaries producing in the Netherlands, will find American competition tougher in third country markets both inside and outside the EEC.

Norway: An improved market position is foreseen mainly for U.S. products that were previously price-competitive with imports of European or Japanese products. However, the 7 percent dollar drop will be of no benefit to U.S. goods which have little product differentiation from competing goods, since their prices are often too far out of line. For example, some U.S. general purpose pumps were priced 40 percent above the competition.

In machinery, new opportunities should appear. However, they also will depend on an expansion in Norwegian industrial investment, which in turn will depend on an improvement in the level of business activity in Norway's major export markets.

For transport equipment no additional gains are expected on the sale of commercial aircraft, which represents the bulk of this category, but heavy duty off-road equipment may be favorably affected.

In scientific and technical instruments, the outlook is somewhat similar to that for machinery and it is also subject to the same reservations. In addition, the buying decisions are determined more often by the level of technology and reliability of the equipment than by the price.

The monetary adjustments, coupled with continued buoyant consumer demand, make the outlook for consumer goods of all types particularly attractive. However, it is difficult to pinpoint specific opportunities because buying decisions are commonly based on considerations of design and quality, as well as price, and the relative importance of each is variable.

The realignment is not expected to affect significantly the competition between Norwegian exports and U.S.-produced goods. In third markets, the competition is largely in products whose sales take place at world market price levels, e.g. pulp and paper, and aluminum. Sales to the United States are also not expected to be seriously affected.

NEW OPPORTUNITIES IN SCANDINAVIA—*The currency realignment has enhanced prospects for many U.S. goods. Here, A. R. Henson, President of Disco Engineering Inc., a new-to-market firm, points to his product during a Building Equipment and Materials Show in late March at the U.S. Trade Center for Scandinavia.*

Spanish outlook improves

Spain: Although it is too early to find much evidence, representatives of Spanish industries tentatively see a generally improved situation resulting from the depreciation of the dollar for some U.S. goods. Importers in several product lines have indicated their belief that rises in U.S. dollar prices will quickly eliminate the potential realignment price advantage.

In electronics, firms disagree on the effects of the realignment, mainly because there have also been price increases in the United States and price increases on other goods produced in U.S.-owned foreign subsidiaries. While peseta prices of Japanese goods have risen 8 to 9 percent, these are still the lowest in Spain. The French are also pushing electronic products, but it is still too early to discern any trends.

American processed foods have been somewhat higher priced than products from other sources. It is expected that the new exchange rates will considerably assist U.S. products in overcoming this disadvantage.

Traditionally, three firms working under U.S. license and importing a percentage of their components from the United States have received the largest contracts in Spain for combustion equipment. Although there is no direct Spanish competition, French firms in the last two years have secured several contracts with prices about 12 percent lower than those for U.S. equipment. The new exchange rate will definitely help the U.S. competitive position, but price rises in the United States may quickly dissipate the advantage.

Lower prices will improve sales of heavy industrial electrical equipment because the tariff advantage obtained by EEC suppliers through the Spain-EEC Agreement is of no real consequence.

Preference for U.S. heavy construction and mining equipment is extremely strong and the new

prices on them should improve already good sales possibilities.

The prices for American machine tools are reportedly about double those made in Europe. Therefore, the depreciation of the dollar should not significantly improve the competitiveness of the American product. Furthermore, the U.S. dollar prices on some of these tools have already been increased since the realignment.

The Spanish Ministry of Commerce predicts a better economic showing in 1972 and forecasts about a 22 percent increase in total imports. U.S. exporters could well benefit from this expansion. If their market share holds at its 1971 level, this could mean $170 million in additional sales.

Swedish technology growth

Sweden: Machinery and equipment, which accounted for 40 percent of U.S. exports to Sweden last year, will become more competitive because of the realignment —particularly against products from Germany, the leading supplier. By far the most dynamic sector of U.S. exports is that of high-technology capital goods, required in Sweden to remain competitive with other countries. (Swedish labor costs are the highest in Europe.)

The U.S. Embassy reports that major Swedish buyers are forcing importers to sell goods to them at lower prices which reflect the new exchange rates. For example, U.S.-produced electronic components sold to the large electronic product companies cost significantly less than before, particularly in comparison with German and Japanese products. Aircraft, coal, metals and alloys, and industrial chemicals should also be more competitive.

Moreover, it is felt now that the currency realignment may encourage U.S. subsidiaries in Sweden to buy more of their inventory from their parent companies rather than from affiliated plants in Western Europe. This tendency is expected in sophisticated product fields such as EDP equipment, electronic components, and industrial process control equipment. In most cases, however, established supply arrangements are likely to continue.

The U.S. Embassy reports that Swedish importers who sell through dealers (rather than directly to the end-user) do not appear to be lowering prices of U.S. goods to reflect the new exchange rates. Even in such cases, however, sales of these products should benefit indirectly. Swedish importers will find it more profitable to sell some U.S. goods, if dollar prices are held down to pre-devaluation levels, than more expensive goods from Sweden's leading foreign suppliers, Germany and the United Kingdom.

U.S. products competing against Swedish goods in third country markets will gain a modest competitive advantage from the exchange rate changes. The main sectors in which Sweden competes with the United States are paper products, office machinery, non-electrical machinery, specialty steels, precision equipment, and telecommunications equipment. The realignment should give U.S. goods an improved competitive position across-the-board, except where Sweden's special advantages —such as forest products and specialty steels—may outweigh small price differences.

The currency realignment is not expected to affect seriously Swedish exports to the United States, which totaled $492 million last year. The principal Swedish exports (automobiles, specialty steels, other high-quality items) are relatively insensitive to price variations. On the contrary, the expected expansion of the U.S. economy this year should result in an increase in Swedish exports to the United States.

Few short-run Swiss gains

Switzerland: A U.S. Embassy survey of Swiss importers indicates that, with few exceptions, no short-run improvement is being seen in the competitiveness of U.S. goods in the Swiss market as a result of the realignment. Any positive effects are not likely to be noticeable before mid-1973.

For many types of Swiss imports price competitiveness is an important factor. For others, however, it is somewhat less important than quality, service and continuity of supply. As a result, the recent dock strike had a strong adverse effect on Swiss buyers' attitude toward the reliability of U.S. suppliers, and caused many end-users to turn to more dependable foreign sources.

The realignment is providing few gains for many U.S. agricultural exports to Switzerland as they are already considerably higher priced than competing goods produced locally or imported from other countries. On the other hand, no increases in dollar prices have been reported so far for major imports of U.S. goods, including all U.S. agricultural products, although there have been increases in the prices of some other U.S. products.

Products benefiting

The following are product areas in which price reductions in Swiss francs have followed the realignment and have benefited the U.S. competitive position in the Swiss market:

In paper and pulp, U.S. prices are still exceptionally high despite the parity changes, and Scandinavian competition is fierce. Nevertheless, the converse is true for specialty papers, in which U.S. suppliers have now gained a competitive advantage.

The parity changes created possibilities for significantly increasing sales of U.S. consumer goods. According to one executive, all the major Swiss department stores have renewed their interest in the United States as a source of supply. One representative of a leading store said, "U.S. imports appear to make sense now; if the U.S. rate of inflation does not outstrip Europe's, the sale of U.S. consumer goods will triple."

Prices in francs for U.S. origin plastic raw material have dropped, but, in the opinion of a major end-user, prices would have come down anyway because of the existence of excess supplies.

For high energy and nuclear equipment lower franc prices are being passed on to some buyers of U.S. goods even though price is of secondary consideration compared with quality and accuracy.

In test and quality control instrumentation a 5 percent price reduction is being passed on to buyers, thereby improving the competitive position of U.S. suppliers vis-a-vis those in third countries.

Importers and suppliers of intermediates to the Swiss chemical industry report that the competitive positions of U.S. produced sulphur, pigments, petro-chemicals, and phosphates have improved in Switzerland.

In low-voltage power equipment American suppliers already have a strong position in the Swiss market. Even a 5 percent reduction in the price in francs will enable U.S. producers, especially for relays, to increase their market share at the expense of the Germans whose export prices were recently raised by 10 percent.

On large-scale construction projects U.S. firms are in a better position to bid as a result of the exchange rate realignment. Checking the rate of inflation in the United States has further improved the competitiveness of U.S. firms, since they can shave their cost projections for the construction period. Nevertheless, consortia with Swiss firms will probably be essential.

Brighter U.K. outlook

United Kingdom: The outlook for sales of U.S. goods on the U.K. market has clearly improved as a consequence of the currency realignment. U.S. exporters received a potential 7.9 percent improvement in their competitive position relative to British goods in the United Kingdom and in third country markets.

Canada has allowed its dollar to float since June 1970. During the past 12 months the Canadian dollar has changed little in relation to the U.S. dollar and has thus depreciated nearly as much as the latter relative to other major trading currencies.

While the U.S. holds more than 70 percent of the Canadian import market, the competition from overseas suppliers, particularly the Japanese, has been intensifying. The new currency advantage is providing an offsetting factor in this regard, the U.S. Embassy in Ottawa notes, and gains are deemed most promising at this time in the automotive sector, both for passenger cars from the U.S. and for U.S.-supplied parts for Canadian auto production.

For Canadian producers, the U.S. currency realignment has given Canada an edge in the big U.S. market against the Japanese, German and other foreign competition. But continued improvement of the Canadian position will depend on how well the rate of inflation in Canada is held back.

This competitiveness will receive a further boost as a result of the continuing inflation which is more severe in the United Kingdom than in the United States. At the same time, efforts by the British Government to stimulate the economy and reduce unemployment should provide a more rapidly expanding market for U.S. exports to the United Kingdom.

The currency realignment also enhanced the competitiveness of U.S. goods in the U.K. market in competition with those from the other major European countries, which will be helpful in offsetting the impact of Britain's entry into the Common Market.

Most observers are agreed, however, that a really extensive and definitive analysis of the trade effects of the currency realignment cannot be made yet, particularly since earlier British experiences with devaluations have clearly shown that such implications, in terms of export-import prices, take about two years to become fully manifest. A large number of variables are involved which enter into final price determination, such as raw materials costs, foreign sourcing of components, transportation costs, long-term contracts and parent-subsidiary trading and pricing relationships.

U.S. price competitiveness

U.S. price competitiveness should be significantly improved vis-a-vis U.K. producers for standardized electronic components, general electrical machinery (except heavy plant), high-priced textiles, consumer goods such as toys and games, air conditioning equipment, natural gas related equipment, pumps, and packaging machinery. Realignment has also improved U.S. prospects for radios, television broadcasting equipment, and products to be used in North Sea gas and oil exploration, production and transportation systems. U.S. competitiveness should also be strengthened against third country competition in the United Kingdom in the sale of general machinery items (including those mentioned above) and for machine tools.

Nevertheless, examples of U.S. produced commodities for which prices in local currency have not thus far been reduced to reflect the dollar depreciation include scientific equipment, instrumentation, telecommunications equipment, electronic capital goods, publications, agricultural machinery and steel. Furthermore, the main competitors in the sale of U.S. agricultural goods sell aggressively through quasi-government commodity boards and can be expected to follow downward the price decreases in local currency for U.S. goods.

American exporters must, of

course, expect more intense competition in the U.K. market from continental suppliers as Britain enters the Common Market and internal tariffs are reduced and eventually eliminated. Fortunately, there will be a reduction of the average level of duties applied to imports of U.S. industrial goods into the United Kingdom when it adopts the Community's Common External Tariff, as it is appreciably lower for them than is the present U.K. tariff.

Helps offset EEC entry

The improved competitiveness of U.S. goods as a result of the dollar's depreciation will be a significant help in offsetting the impact of the reduction and eventual elimination of U.K. duties on imports from other EEC members. In addition, if Britain's entry into the Community leads to a speedup in its economic growth, as is expected, then U.S. exporters should benefit from the expansion of its membership.

As a result of the currency realignment the United Kingdom has also gained relative to several of its major industrial competitors. The pound depreciated against the yen by 7.65 percent, the mark by 4.6 percent, the Swiss franc by 4.9 percent, and the Benelux currencies by 2.8 percent. This improved position, combined with the effect of the reduction and eventual elimination of EEC tariffs on U.K. goods moving into the Common Market, will probably encourage a restructuring of the pattern of U.K. exports with a greater emphasis on continental as opposed to North and South American markets. This trend could be accelerated by the depreciation in terms of the pound sterling of the currencies of South Africa, Australia, New Zealand and India.

The overall effects of the currency realignment on the level of economic activity in the United Kingdom are likely to be limited and to take effect over an extended period. The reflationary policies being implemented by the British Government are likely to be considerably more significant. Although unemployment is still high and private investment remains sluggish, the U.K. economy is beginning to recover, and this trend should be accelerated by further stimulative measures expected to be adopted by the government.

The realignment of currencies will also affect the competitiveness of U.K. exports vis-a-vis U.S. products in the U.S. market and in third markets. Sales of U.K. exports to the U.S. market are now seen likely to experience slower rates of growth in chemicals, consumer goods such as toys and games, sporting goods and electronic entertainment equipment, machine tools, textile machinery, and the lower priced motor vehicles. U.K. exports of Scotch whiskey and textile goods are unlikely to be adversely affected, since U.S. demand for these products is relatively unaffected by price changes.

In third markets, it is felt, U.S. exporters may find enhanced opportunities in competition with U.K. suppliers of machinery of all kinds, transportation and construction equipment, chemicals and telecommunications equipment. The areas most likely to offer the best prospects of this sort include Australia, Malaysia, Hong Kong, Singapore, and the Near East.

Early Latin American Results: An Edge Against Third Countries

Early reports from Latin America on the effect of the currency realignment tend to emphasize the new opportunities for U.S. exporters to edge out third country competition.

Argentina: The recent international currency realignment is seen to significantly improve the ability of U.S. exporters to compete with third country suppliers in the Argentine import market. The extent of such improvement is dependent on the degree to which third country suppliers will be willing to reduce their prices.

U.S. suppliers of intermediate products and capital goods are the most likely to benefit from improved price competitiveness. Prospects for U.S. supplier gains are brightest in intermediate goods. With regard to capital goods, however, buyers will also need additional medium-term loans. For this reason, credit and financing competitiveness is just as essential and is frequently more important than price competitiveness.

Impediments to growth in Argentina's imports from the United States and elsewhere include economic instability, low foreign exchange reserves, and large foreign currency indebtedness.

Any improvements in Argentina's price competitiveness in the United States market or elsewhere resulting from international currency realignments have been obscured by the effects of continuing shifts in the domestic economic outlook. These shifts have been influenced by a high rate of inflation with attendant increases in living and business costs, changes in governmental policies and high-level officials, labor strikes and general uncertainty.

Effect in Brazil

Brazil: The recent dollar depreciation did not improve the competitive position of U.S. exports vis-a-vis domestically produced goods in the Brazilian market. The exception might be for domestic goods which have a high import component supplied by third country competitors whose currencies appreciated.

However, the competitive position of U.S. exports to Brazil

should improve vis-a-vis imports from third countries whose currencies have been revalued upward. The value of the Brazilian cruzeiro in terms of the dollar was not changed as a result of the dollar depreciation. The Brazilian government is continuing to follow the system of small, frequent devaluations of the cruzeiro to reflect domestic and external inflation.

Similarly, Brazil's competitive position in the U.S. market should remain unchanged with respect to U.S.-made products, but it should improve vis-a-vis the exports from competitors with appreciated currencies.

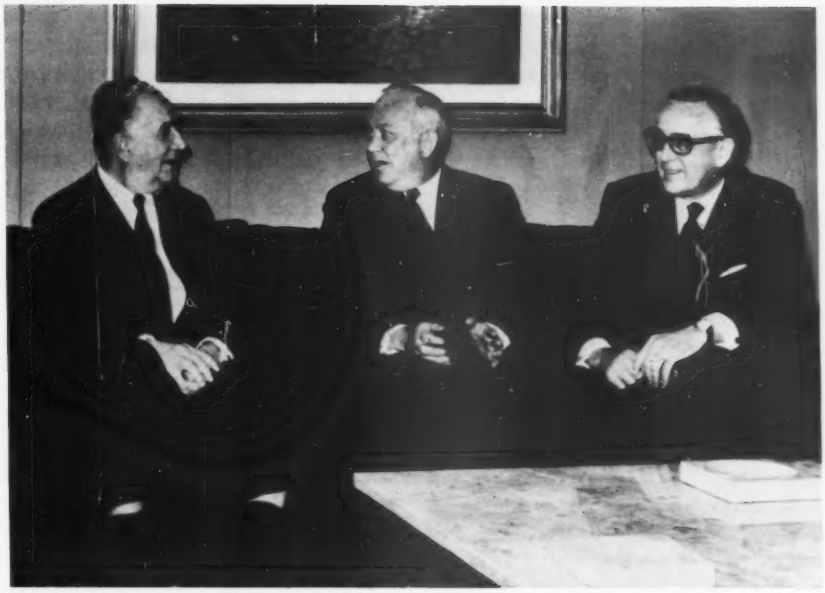
It is expected that Brazilian importers will tend, in general, to avoid higher import costs resulting from realignment by switching to lower priced U.S. suppliers. However, the U.S. price advantage shows signs of being eroded through a combination of 1) price cuts by third country competitors and 2) increases by U.S. exporters.

The primary benefits thus far accruing to U.S. exports to Brazil as a result of the realignment are: 1) a marked improvement for the price-competitiveness in electric power generation and distribution equipment; 2) a narrowing of the price differential between U.S. machine tools and those of Japan and Europe; 3) renewed interest in U.S. locomotives; and 4) a shift toward U.S. suppliers for packaging equipment for which the price differentials previously favored third country suppliers by up to 20-25 percent.

Possible Colombian shift

Colombia: The majority opinion in Colombia is that recent U.S. monetary developments will begin to produce a long-term shift to U.S. suppliers within the next several months and away from third country sources whose currencies appreciated.

The Colombian peso remains linked to the dollar in a flexible exchange rate system providing for steady and controlled depreciation. However, ties to traditional suppliers and the need for consistency in plant equipment and servicing will preclude rapid adjustments.



DISCUSSING U.S.-BRAZIL TRADE—*During a business trip to Brazil last year, Henry Kearns, Chairman of the U.S. Export-Import Bank (center), talked with Brazil's President Medici (left) and U.S. Ambassador William M. Rountree.*

Interviews with 40 Colombian importers revealed price increases for European and Japanese goods ranging from 8 to 20 percent on textile machinery, some industrial chemicals, graphics machinery, battery locomotives, mining machinery, heavy trucks, and a wide variety of capital goods. U.S. firms might increase their share of aircraft purchases and might be able to penetrate the hydroelectric market.

A number of goods from the United States remained more expensive than goods from other countries, even after the currency realignment; they include: finished and semifinished iron and steel, air compressors, scientific laboratory equipment, medical and surgical equipment, microwave networks, jeep-type vehicles, most electrical transmission equipment, and automatic telephone exchanges.

Despite their improved price competitiveness, sales of U.S. produced goods will continue to require aggressive salesmanship and longer term financing. In addition, it is still necessary to adapt some high capacity U.S. equipment to the lower capacity needs of the Colombian market. Furthermore, the temptation felt by some U.S. manufacturers or local commission agents to raise prices for a larger profit margin should be avoided. U.S. exporters who were formerly excluded from the Colombian market because their products lacked price competitiveness should now investigate new sales potential.

The currency realignment will have little effect on Colombia's exports to the United States. Sales of Colombian exports other than coffee are expected to improve, mainly due to government promotion efforts.

Other factors in Mexico

Mexico: The realignment will enable U.S. products to be more competitive in the Mexican market compared with similar products from Europe and Japan. The extent of the competitive gain, however, will depend on 1) any subsequent adjustment of prices and credit and marketing techniques, 2) purchaser preferences based on

quality, convenience, compatibility and trade affiliations and 3) government policies and pressures.

The effect of the realignment should be particularly important to United States capital goods producers because the currencies of two principal competitors, West Germany and Japan, were appreciated more than any others. Some products for which the U.S. shares in the Mexican market declined in recent years, but which are now likely to recover as a result of the realignment, include printing, textile, plastic and metalworking machinery. These U.S. produced goods have traditionally enjoyed a Mexican market preference because of convenience and quality considerations which have resulted in their continued sale even when priced higher than European equipment.

However, many Mexican importers had turned to European suppliers when the price differentials for that equipment exceeded 30 percent. For some equipment they had risen 35 to 40 percent, well beyond the price differential shift point. Nevertheless, there were indications soon after the currency realignment that some third-country competitors were attempting to absorb part of the peso price increases resulting from the appreciation of their currencies. The Germans, for example, were trying to absorb around 10 percent of their 14 percent exchange appreciation.

Likely to benefit

U.S. exports of items such as chemicals, asbestos, paper, plastics and synthetic fibers will likely benefit from the realignment. Of these, however, chemicals are the only major commodity for which the United States has lost part of its Mexican market share; any market share increase in the other lines would probably be fairly small as this country already dominates the Mexican market.

An area which is particularly difficult to evaluate is electric power equipment, as a few major multinational corporations already control the field. The actual effect on U.S. exports of this equipment to Mexico, directly or through third countries, will depend largely on the production and marketing decisions of these firms. However, even here U.S. exports might gain. The same situation also applies to Mexican imports of construction equipment, as almost all of them are already supplied by the United States.

The realignment will make some Mexican products more competitive in the U.S. market compared with similar products imported from Europe and Japan.

Venezuelans may shift

Venezuela: Although it is still too early to determine the full effect of the exchange rate realignment on U.S. exports to Venezuela, it is expected to be minimal. Some shift away from European, and especially Japanese, suppliers in favor of U.S. exporters is possible, but the total value will be slight and confined to special types of goods.

The effect on U.S. trade will vary among different commodities. Gains are thought possible for those that previously had a price differential of 15 percent or less when compared with imports from third countries. They include certain steel products such as pipe, wire and wire rods, which may now be competitive with Japanese products. Some gains could be made in heavy U.S. industrial machinery for which the price differential is often under 10 percent, and is preferred because of better repair service, including the availability of spare parts. For agricultural products, some gains may be expected in exports of U.S. apples and hop extract. Some additional sales are also anticipated in industrial bulk chemicals and plastic resins.

Effect In India, Pakistan, Israel Seen Slight So Far

Commercial Officers in U.S. Embassies in the Near East and South Asia are reporting only minor trade repercussions so far to the December currency realignment.

India: Shortly after the Smithsonian Agreement the Government of India revalued the rupee upward by 3 percent relative to the dollar and devalued the rupee relative to other major hard currencies.

The impact of currency changes on U.S. exports to India is seen as minimal for the following reasons: 1) The change in rupee-dollar parity was so small it will have little impact on the relative competitiveness of U.S. and Indian-made goods. 2) Approximately two thirds of the U.S. exports to India in recent years have been sold on concessional terms, as have most of the imports from other countries. 3) Distances between the U.S. and India add a heavy freight burden. 4) The Indian economy is heavily insulated from monetary movements in the outside world by a strict import licensing policy and a heavy dependence on rupee-financed trade.

For these reasons, India will continue to rely primarily on the availability of goods on concessional terms rather than their cost to determine the source of its imports.

The U.S. Embassy estimates that $422 million of the $595 million in U.S. goods exported to India in 1970-71 were purchased on concessional terms. All of the Group of Ten nations are also India donors; thus much of their exports are similarly dependent upon concessional financing and sheltered from changes in exchange rates.

In the coming year the magnitude of U.S. exports to India will depend primarily on the continued availability of concessional financing; the commodity composition, in turn, will reflect the extent to which sale of a particular product is dependent on aid funds.

India will continue to buy U.S. products which are decidedly cheaper, such as tallow and soybean oil, regardless of the availability of aid financing. However, India is likely to shift to those sources from which aid is most readily available for steel, chemicals, and electronics products.

Price changes in Israel

Israel: A significant expansion of U.S. exports to Israel can only be achieved at the expense of other countries' shares of that market, not at the expense of Israeli products. The American Embassy in Tel Aviv notes that Israel devalued its own currency by 20 percent last August and then devalued again with the dollar, thereby depreciating its currency even further against other currencies. The Embassy adds that U.S. competitiveness against third country products is unlikely to have been significantly improved by these monetary developments because many European firms are said to be offsetting this action by decreasing their prices while American firms are concurrently raising theirs.

Improvement in the U.S. export performance in Israel is also being hampered by other problems. Those most often noted are: the benefits accruing to Common Market manufactures due to the Community's preferential trade agreement with Israel, the excessively high cost of U.S.-Israel sea transport and the indifference of U.S. exporters to the potential of the Israeli market.

Under the Israel-EEC trade pact, the tariff concessions extended to EEC exports generally offset the loss in their price competitiveness due to the currency rate realignment. Israeli agents and distributors also increasingly point to the much higher cost of shipping from the United States to Israel when compared to the cost from Europe as a hindrance to American sales. Despite these problems, however, the Embassy believes that U.S. products do find a good market in Israel—provided American manufacturers are willing to give them the proper profit-making attention they deserve.

According to the Embassy, U.S. exporters to Israel also mention that Israel's adoption of the EEC standards for automobiles is a barrier to U.S. sales. So too are the wide differentials between prices for the same products charged by U.S. parent companies and their European subsidiaries.

Still too costly in Pakistan

Pakistan: The international monetary adjustment is only marginally affecting Pakistan's trade with the United States. Under the recent currency realignment, the government maintained the parity of its currency with the U.S. dollar. Therefore, the prices of U.S. goods should remain steady, while Pakistan's non-dollar purchases are likely to become somewhat more expensive. However, this shift in prices is still not likely to result in a significant growth in the sales of U.S. produced goods.

Many Pakistani businessmen have long held that U.S. goods were priced 35-50 percent higher than those from Japan and Europe, and they now assume that as a result of the realignment the U.S. products are still 20-35 percent more costly. The growth of Pakistan's purchases also will be minimal because very few consumer goods are imported from the United States or other hard currency countries, and because capital equipment is generally imported under foreign financing programs which usually tie procurement to the donor.

The main problems and opportunities for U.S. suppliers are largely unrelated to the currency realignment. Political instability and disruption to industry and commerce resulting from recent hostilities have seriously impaired economic growth prospects. The country's free foreign exchange reserves are extremely limited and would be close to nonexistent were it not for the unilateral moratorium on official foreign debts imposed in May 1971. Thus, Pakistan's commercial purchases will continue to be severely restricted in the near term.

However, if foreign aid and commercial financing resume at levels comparable to those prior to the 1971 hostilities, imports from the United States are likely to increase in products such as computers, communications equipment, commercial aircraft, tractors and farm machinery. On the other hand, the market for U.S. agricultural products sold under the P.L.-480 program should remain strong.

There are also some sales opportunities for U.S. products resulting from the stoppage of Pakistan's trade with Bangladesh; these include timber, matches, paper, pulp, bags and packing material, and newsprint.

SELLING IN ISRAEL—*At a recent U.S. Solo Exhibition in Tel Aviv, EPEX 72, U.S. Ambassador Walworth Barbour (left) is briefed on a U.S. product.*

New U.S. Edge On Japan Vital In Asian Markets

The currency realignment is shifting the competitive edge for many products in Far East markets from Japan to the United States, according to U.S. Foreign Service Posts in the area.

Australian opportunities

Australia: The total volume of Australian imports is currently seen unlikely to change much as a result of the new exchange alignments, but, there is a possibility of some shifts in sourcing, mostly in favor of the United States. The depreciation of the U.S. dollar in terms of the Australian dollar should improve the price competitiveness of U.S. goods in the Australian market in terms of domestic production as well as of imports from the United Kingdom, Japan, Germany and other industrial countries whose currencies were appreciated.

Expansion of U.S. opportunities should take place particularly in association with development of Australia's rich mineral deposits and related processing industries. The best sales prospects are for capital equipment and other products which incorporate the most modern technology.

Because the value of the Australian dollar has changed only slightly in relation to the currencies of Australia's major trading partners, the effects on the rate and pattern of economic growth are expected to be marginal at most. To the extent that there is any measurable effect, it would be in the direction of reinforcing trends already under way. Although the economy has continued to show moderate aggregate growth, there is some unevenness; this has occurred against a background of uncertainty about international monetary developments as well as a concern about accelerating domestic inflation and rising unemployment.

Some Australian officials now believe that the currency realignment will somewhat reduce the total income of their meat exporters in the short run because the United States is their principal market. Australian wheat exporters may be similarly affected because U.S. exporters will be able to offer better prices on sales in third country markets. Since Australian exports to the United States are largely agricultural or pastoral, however, the effects of the exchange realignment on Australian sales will probably be marginal.

Hong Kong needs promotion

Hong Kong: The Hong Kong dollar was appreciated by 8.6 percent in terms of the U.S. dollar. The Colony adopted this level of parity, on the one hand, to hold import price increases as low as possible for food and consumer goods from China and industrial raw materials from Japan. On the other hand, it also wished to keep export prices sufficiently low so that local manufacturers could improve their competitive position against higher-value Japanese wares. However, this currency appreciation enabled exports from Taiwan and South Korea, whose currencies depreciated along with the U.S. dollar, to obtain potential price advantages over Hong Kong in certain goods.

The U.S. Consulate General sees the currency realignments as conferring only a marginally increased competitiveness on U.S. exports to Hong Kong in the short run, despite large revaluations by European and Japanese competitors there. This stems from the Japanese maintenance of competitive local currency prices, their market penetration efforts, ocean freight rate discrimination against U.S. shipments, the better financing terms offered by European and Japanese suppliers, and the unwillingness of many Colony distributors of U.S. brand name products to pass along their potential price reductions to Hong Kong consumers.

Also cited, in the cases of farm and other raw products, are the flexible price subsidization policies followed by some U.S. competitors and upward global price trends. In some cases, U.S. exporting firms have even raised their U.S. dollar prices to maintain overall profits. Only on basic products, such as heavy chemicals and certain machinery, is it likely that the U.S. dollar devaluation will result in significantly lower local currency prices.

Even in the longer run, the price advantages for U.S. exports made possible by the realignment will be slight. The discriminatory ocean freight rates and the generally uncompetitive credit terms offered by U.S. exporters are serious obstacles to U.S. sales growth in Hong Kong and are not easily removed. The price advantages from the U.S. devaluation can slip away, despite the increased Hong Kong dollar prices asked by European and Japanese competitors, if U.S. domestic price stability is not maintained.

In these circumstances, U.S. firms can improve their export performance most by increased trade promotion now. U.S. products do enjoy a generally favorable image in Hong Kong and Southeast Asia, and no time should be lost in capitalizing on this fact. American commodities which seem to the Consulate General most likely to benefit from increased promotional activities are: petrochemicals; raw materials and machinery for Hong Kong's textile and plastics industries; food products; automated production machinery and materials handling equipment; ma-

chinery and equipment related to the construction, hotel and tourist sectors; and air conditioning equipment.

Prospects limited in Japan

Japan: The appreciation of the yen in terms of the U.S. dollar appears to be having only a limited effect this year on the current trend in U.S.-Japan trade. While U.S. exports to Japan may regain the 1970 level of $4.7 billion (having fallen last year to $4.1 billion), no major increase is expected until 1973. Japan's exports to the United States are expected to increase significantly by value again this year, though not as rapidly as last year's 23 percent. As a result, it is likely that the U.S. trade deficit with Japan in 1972 will be slightly higher than last year's record $3.2 billion.

Cited by the American Embassy in Tokyo as the main reason for not expecting a dramatic increase in U.S. exports to Japan this year is the slow recovery of Japan's economy from the slowdown of the last 18 months and the consequent slackness in demand for imports. While Japan's real economic growth this year is expected to be 7 to 8 percent (as compared to last year's estimated 6 percent), this increase in economic activity is not likely to be translated into a major rise in imports in 1972. The Embassy notes that over 95 percent of U.S. exports to Japan are agricultural products, industrial raw materials, and machinery, the demand for which is essentially determined by the growth rate of the Japanese economy; price considerations are secondary, except for exports sold in competition with those from third countries.

Several additional factors also tend to negate, at least temporarily, the hoped-for favorable effect of the currency realignment on the value of U.S. exports to Japan. These include the failure of Japanese importers, particularly the wheat and tobacco monopolies, to pass on the lower prices of U.S commodities to the ultimate consumers; the absorption of price cuts by Japan's cumbersome distribution system with its many echelons of middlemen; the apparent inclination of sales branches of U.S. firms to utilize the "windfall" to cover increased costs of maintaining offices in Japan and to stabilize rather than to reduce their yen prices, especially of specialty industrial products for which domestic competition is limited; and the continuing tendency of Japanese distributors of U.S. consumer goods to sell them at high prices, relying on snob value to move limited quantities at high profit margins.

SYDNEY SHOW—*Pertec Corp.'s Jack Ferris (right), demonstrates his firm's Computer Output Microfilmer to U.S. Ambassador Walter L. Rice (left) and Australian Prime Minister William McMahon at a Sydney U.S. Trade Center show last month.*

Other negative factors

Also offsetting the effect of the yen revaluation are Japanese import quotas on certain important U.S. export products, such as computers, integrated circuits, and citrus fruit; the reluctance of conservative-minded Japanese importers to shift their purchases quickly from third-country suppliers to U.S. sources; the lack of improvement in the U.S. competitive position vis-a-vis certain third countries, such as Canada; the fact that other exporters to Japan have chosen to reduce their prices to meet the lower U.S. prices; and the failure of U.S. business to pay adequate attention to new market opportunities.

Over the longer run, 1973 and beyond, the Embassy foresees increases in traditional U.S. exports to Japan, such as raw materials and heavy machinery, in response to the expected upturn in the Japanese economy to annual growth rates of 8 to 10 percent in real terms. Lower yen prices for U.S. goods which result from the currency realignment are not likely to produce a significant increase in U.S. exports to Japan until the pattern of Japan's imports changes from one dominated almost exclusively by agricultural commodities, industrial raw materials and capital equipment to one in which a greater share than the present 4 percent is accounted for by price-sensitive goods, such as consumer durable and non-durables. However, the added price competitiveness of U.S. industrial raw materials could cause some shifting to U.S. sources.

U.S. exports to Japan which could be increased in the near future as a result of the currency realignment include: specialty petroleum products, such as lubricating oil; pulp; pharmaceutical

products; computers (though limited by import quotas), other electronic capital goods and electrical measuring instruments; semiconductors (also limited by quotas); nuclear power plants; solenoid valves and hydraulic control components; printing and bookbinding machinery; clothing and apparel (if U.S. manufacturers will cut to Japanese body sizes); watches; and automobiles.

Higher sales to Singapore

Singapore: The appreciation of the Japanese yen has improved prospects for increased sales of American goods to Singapore at the expense of Japan. However, it is difficult now to estimate the extent of the shift because price is not necessarily the principal determinant of U.S. sales in this growing market. A sharp increase in exports of U.S. products to and through Singapore is forecast for 1972 as American firms continue to invest in new and expanded facilities in Singapore.

The appreciation of the Singapore dollar should not appreciably affect that country's exports to the United States. Products manufactured in Singapore and shipped to the United States are to a large extent goods being sold by U.S. subsidiaries to their American parents.

The economy of Singapore is highly sensitive to external factors. Should the currency realignments lead to a recession in Japan, the impact throughout Southeast Asia could affect the trading climate in Singapore, the region's principal entrepot port.

The upward revaluation of the yen should cause a slight increase in the cost of living as Singaporeans depend heavily on Japanese consumer goods as well as basic raw materials and industrial equipment. Many categories of Singapore's purchases from Japan do not compete with cheaper substitutes in that country's thin domestic economy.

Discussions with both importers and end users of U.S. goods show a mixed picture, and price changes can not be forecast with any conviction.

Chemicals is one of the areas where the competitive edge has probably shifted from Japan to the United States due to Japanese price increases. In general, consumer goods produced in the United States are not competitive in the Singapore market. Capital goods and industrial supplies will continue to lead U.S. sales, which, as pointed out above, will depend on a continued rapid growth in American investment in that market.

Singapore's importers are absorbing the exchange savings from the dollar devaluation, which accounts for the failure of local currency prices for U.S. goods to decline. However, increased profits may stir importers to more aggressive sales efforts on behalf of U.S. products.

The competitive position for U.S. air conditioning equipment has improved markedly. In one instance, the Japanese withdrew from a major air conditioning tender when the yen's revaluation was announced. However, in other products, the Japanese are reportedly prepared to bid whatever is necessary to win, and therefore their yen list prices have little relevance. Heavy equipment sales, in which the United States is already the dominant supplier, should get an additional boost since the U.S. can now match the Japanese prices. This category will continue to be a major sales item because the timber industry and road building projects are expanding in nearby Malaysia and Indonesia.

New markets in Taiwan

Taiwan: Under the currency realignment the Republic of China maintained the parity between its currency and the U.S. dollar. This action was intended to insure Taiwan's export growth, which is vitally important to its overall economic well-being. In 1971 exports accounted for 34 percent of Taiwan's GNP, with over 40 percent going to the United States.

The U.S. Embassy in Taipei believes that, although the currency realignment did not improve the competitiveness of U.S. exports compared with domestic Taiwan goods, U.S. competitiveness was substantially improved vis-a-vis imports from Japan. Also helping the U.S. position is the recent Japanese hesitancy to expand their economic presence on Taiwan. These developments could open up entirely new markets for U.S. products on Taiwan. Taiwan's continued liberalization of its import regulations should also help U.S. exports.

The Embassy estimates that as a result of these and other factors U.S. exports to Taiwan in 1972 should surpass the 27 percent average annual gains of recent years, perhaps increasing by 35 percent and reaching $800 million.

U.S. exporters should carefully examine prospects for increasing sales of the wide range of goods predominantly supplied in the past by Japan. The most promising of these categories include: turbines, construction and excavating equipment, synthetic staple fibers and multi-filaments, ungalvanized iron and steel sheets and plates, tin plate, tool steel, and textile machinery. Other products worth investigating are: synthetic fiber piecegoods, plastics and resins, steam and internal combustion engines and parts, conveying, lifting, and mining equipment, and scientific instruments and apparatus.

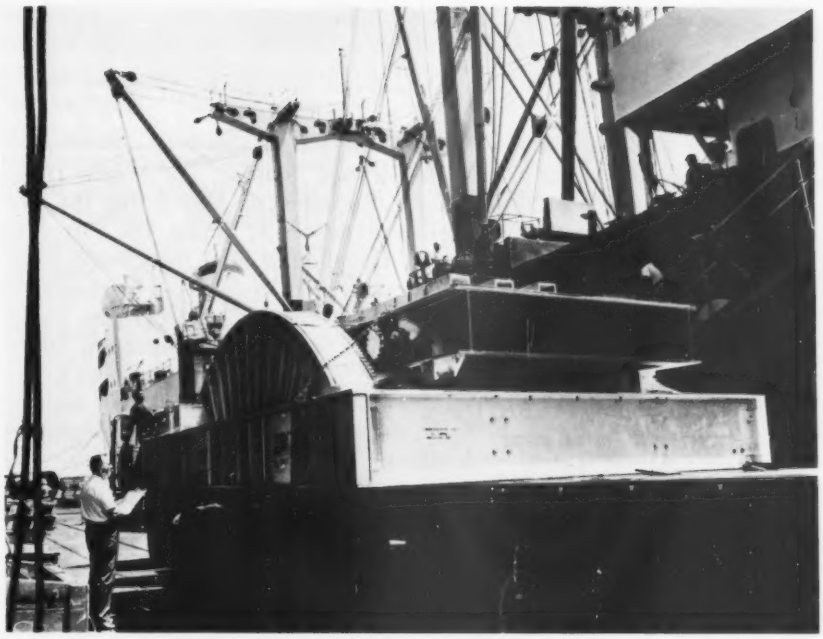
American traders will probably require much of 1972 to determine the extent of their improved competitiveness in these product categories. Therefore, U.S. exports will probably not begin to significantly reflect any gains resulting directly from the realignment until next year. Delivery and financing

obstacles will continue to hinder American sales on Taiwan. Opportunities to supply some U.S. industrial raw materials may exist in 1972, but they probably will disappear shortly due to a rise in Taiwan's own production.

Prospects for sales of U.S. exports after 1972 should also improve markedly in capital equipment, and construction and engineering services, due to the Republic of China's ambitious plans to improve its economic infrastructure and industrial capabilities. There are already plans well under way for the construction of new power plants, a new harbor, a 275-mile freeway, a modern island-wide communications net, an international airport, water and sewerage works, railroad improvements, an integrated steel mill, new shipbuilding yards, a petroleum refinery, various petrochemical intermediate plants, an aluminum refining and fabricating plant, a caprolactum plant, and a phosphoric acid plant, to name a few.

Modest gains in Korea

Korea: The United States is expected to make only modest gains in trade with Korea as a result of the currency realignment. The Korean won, which was devalued by 13.6 percent in terms of the U.S. dollar in June 1971, depreciated again under the realignment by the same amount as the U.S. dollar. The combined effect of the overall realignment was to make Korean imports from virtually all countries, including the United States, more expensive than before. Nevertheless, the competitive position of U.S. products improved relative to those of countries whose currencies appreciated in terms of the dollar. This shift in relative price competitiveness will discourage purchases from Japan and other major appreciating countries, and will result in a gradual redistribution of Korea's import pattern that may benefit the United States.



HEADED FOR KOREA—*An electric furnace made by the Inductotherm Co., Rancocas, N.J., is readied for loading. The realignment should boost U.S. sales to Korea.*

The U.S. Embassy in Seoul reports that the level of U.S. exports might grow as a result of the realignment by as much as $46 million, assuming that U.S. firms provide personal salesmanship backed by competitive prices and credit arrangements, servicing follow-through, and expanded advertising. The U.S. exports most likely to gain collectively accounted in 1971 for about 35 percent of the total exported to Korea and amounted to $240 million. The relatively homogeneous commodities in this group have the most potential to benefit; they include hides, wood pulp, resins, iron and steel scrap and polyacriol nitrite. Also having a potential for sales increases are instruments, marine steering equipment, parts of radios, circuit breakers, and certain air compressors and pumps.

The remaining 65 percent of the exports will probably not benefit because virtually none of them is currently imported by Korea from countries whose currencies appreciated in value. This list ranges from food grains and ginned cotton, where the U.S. position is based largely on P.L.480 shipments, to aircraft and helicopters, where the United States remains strongly competitive.

Offsetting factors

Several factors could offset possible increases in U.S. exports to Korea: The potential price increases in Korean won on imports from countries whose currencies appreciated might be absorbed in varying degree by their exporters; although prices in won charged for Japanese goods have increased in almost every known instance since the realignment, they remain lower than those of most similar U.S. products; and additional import restrictions imposed by Korea in an effort to counteract its worsening trade balance may prevent increases in U.S. exports of some commodities.

Korean exports to the United States may show a modest increase as a result of the currency realignment, as their competitiveness has improved vis-a-vis goods produced in countries which revalued their currencies upward, e.g., Japan and Hong Kong.

Washington's

Official Trade Briefs

This article is another in a series of monthly reports outlining actions by domestic, foreign, or international agencies affecting world trade, as compiled by the Legislation and Tariff Analysis Division of the Bureau of International Commerce's Office of International Trade Policy, and by the BIC Office of International Investment.

THE PRESIDENT

President Increases Tariffs on Earthen Dinnerware: On April 24, the President issued a proclamation raising the tariff rates on certain earthen and china dinnerware and mugs, effective May 1. The President's action follows a recent Tariff Commission finding that imports of the articles in question had injured the domestic earthenware industry. The Commission recommended that the injury be remedied by tariff increases. Under provisions of the Trade Expansion Act of 1962, the newly-proclaimed escape-clause rates of duty will remain in effect for four years, unless reduced or terminated sooner by the President.

Staged Termination of Window Glass Protection: On May 1, the White House announced that the President has decided to take no action on the evenly divided report of the Tariff Commission on its escape clause investigation of flat glass and tempered glass. As a result, the previously scheduled three-stage termination of escape-clause tariff protection on window glass began on April 30 (see *Commerce Today*, Feb. 21, pp. 41-42). Although the escape-clause tariff rates will now be phased out, workers in the sheet glass industry will still have the opportunity to request certification of eligibility to apply for adjustment assistance.

New Voluntary Restraint Arrangement on Steel Exports to the United States: The White House announced on May 6 that the steel producers of Japan, the European Community, and the United Kingdom have undertaken to renew for three years (1972-74) the voluntary restraint arrangement on exports of steel mill products to the United States, which had been in effect since 1969. The producers of the United Kingdom had not participated in the earlier arrangement.

In accordance with this undertaking, Japanese steel producers will limit shipments of steel mill products to this country in 1972 to a level not exceeding 6,498,000 short tons. In 1973 and 1974, the Japanese producers will limit their shipments to a level not exceeding 2½ percent above the previous year's limitation. The steel producers of the European Community, joined by the United Kingdom producers, will confine their shipments to 8,013,794 short tons in 1972. In 1973 and 1974, shipments will be limited to 8,093,543 tons and 8,295,910 tons, respectively, for an average growth rate of 2½ percent per annum for the three-year period. Under the previous arrangement the rate of growth was five percent.

Under the new arrangement there are provisions for periodical consultations on any problem or question that may arise during the period the arrangement is in effect. These consultations may be initiated either by the U.S. Government or by the producer associations.

The eight countries participating in the voluntary arrangement accounted for approximately 85 percent of total steel mill products imported into the U.S. in 1971.

A detailed review of the voluntary restraint arrangement and of U.S. steel imports will be presented in a subsequent issue of *Commerce Today*.

New Law: On April 29, the President signed into law S.J. Res. 218, to extend from May 1 to Aug. 1, 1972 authority to regulate exports (P.L. 92-284).

Investment Tax Credit: On April 11, the President issued an Executive Order which makes retroactive for the period Aug. 15-Dec. 20, 1971 the Investment Tax Credit for the following articles of predominantly foreign origin: 1) items in which the unit cost to the taxpayer does not exceed $500; and 2) agricultural implements, machinery, and equipment which are determined by the Secretary of the Treasury to be duty free in the Tariff Schedules of the United States (TSUS).

CONGRESS

Committee Action: Committee hearings in April were highlighted by Secretary of Commerce Peter G. Peterson's appearance before the Subcommittee on Priorities and Economy in Government of the Joint Economic Committee. As Chairman of the National Commission on Productivity, Secretary Peterson testified on the need to improve America's competitive position through increased productivity. Testimony was also received from C. Jackson Grayson, Chairman of the Price Commission, and from members of the business and academic communities.

In the Senate, the Merchant Marine Subcommittee of the Committee on Commerce held several days of hearings concerning S. 3404, to require that at least 50 percent of oil imports be carried in U.S. flag vessels.

In other Senate action, the International Finance Subcommittee of the Committee on Banking, Housing, and Urban Affairs held an oversight hearing on May 4 to consider an amendment restricting the exportation of logs.

Trade adjustment assistance has been the subject of recent hearings

before the Subcommittee on Foreign Economic Policy of the House Foreign Affairs Committee. In other House activity, the Committee on Agriculture's Subcommittee on Domestic Marketing and Consumer Relations met in executive session and approved for full committee action H.R. 7661, to allow for the imposition of restrictions on imports of papayas.

Upcoming Hearings — Foreign Economic Policy Organization: The House Foreign Affairs Committee is scheduled to hold hearings in early June, following the Memorial Day recess, on the organization of the executive branch for dealing with foreign economic policy issues. Invited witnesses include the Secretaries of Commerce, State and Treasury; the Director of the Office of Management and Budget; and the President's Special Representative for Trade Negotiations.

New Legislation: Since the opening of the 92d Congress, some 453 trade and related bills have been introduced. Of these, 101 contain specific quota provisions and 42 contain general orderly marketing provisions, applicable when imports surpass stated levels of domestic consumption. Legislation not previously reported includes: S. 3468, to increase the rate of duty on shelled filbert nuts; S. 3508, to allow for the imposition of restrictions on imports of papayas; H.R. 14386, extending until June 30, 1974 the suspension of duties on certain forms of copper; and H.R. 14624, to provide for orderly trade in fresh fruit and vegetables.

TARIFF COMMISSION

Adjustment Assistance—Firms: In April, the Tariff Commission opened a new investigation to determine if the Duchess Footwear Corp., Salem, Mass., is sustaining injury from increased imports. After examining the effect of imports, the Commission will determine whether the firm is eligible to apply for adjustment assistance.

Adjustment Assistance — Workers: In its reports of six investigations on behalf of worker groups, the Tariff Commission found in four cases that the criteria establishing eligibility for adjustment assistance were not met. Those involved in the negative determinations include workers at the following plants: Baldwin-Lima-Hamilton, Eddystone, Pa. (**ship driving propellers** and **hydraulic equipment**); Pittsfield Shoe Corp., Pittsfield, N. H. (**women's leather shoes**); Cambridge Tile Co., Cincinnati (**glazed ceramic tile**); and B.F. Goodrich General Products Corp., Riverside, N. J. (**rubber catheters**).

As the result of two positive determinations, workers at the following plants are eligible to apply to the Secretary of Labor for adjustment assistance: General Instrument Corp., Joliet, Ill. (**automobile radio tuners**); and C. G. Conn, Ltd., of Oak Brook, Ill. (**brass wind musical instruments**).

The Commission also opened five new investigations into the effect of imports on workers at Ohio Leather Co., Girard, Ohio (**calf** and **kip upper leathers**); Duchess Footwear Corp., Salem, Mass. (**women's** and **misses' footwear**); Remington Rand Products Division of Sperry Rand Corp., Elmira, N. Y. (**electronic desk calculators, electric** and **manual typewriters and parts**); Wilson Shoe Corp., Shamokin, Pa. (**women's** and **misses' footwear**); and General Electric Company, Utica, N. Y. (**radio receivers, phonographs and tape recorders**).

Section 337 (Unfair Import Competition) Cases: Following the requisite period set aside for rehearing and appeal, the Tariff Commission recently submitted to the President final reports concerning separate investigations into complaints filed by: 1) Ben Walters, Ben Walters, Inc., and Kage Co., Inc., alleging infringement of a process patent involving imported **decorative plaques** comprised of plastic sheets having an openwork structure; and 2) Atlantic Products Corp., alleging patent infringement involving certain imported **lightweight luggage**. In both cases, the Commission found violation of the statute and recommended that the President issue a permanent exclusion order (see *Commerce Today*, Jan. 10 and March 20).

Dumping Cases: The Tariff Commission recently initiated investigations to determine injury in connection with two cases referred by Treasury: **hand pallet trucks** from France; and **welded-wire mesh** from Belgium. Earlier (see below), imports of both products were determined by Treasury to be sold at less-than-fair value (LTFV).

In its investigations of three other products found to be sold in the United States at LTFV, the Commission determined that U.S. industries were sustaining injury. As a result of the Commission's findings, LTFV imports of the following products will now be subject to special dumping duties: **large power transformers** from France, Italy, Japan, Switzerland, and the United Kingdom; **fish netting of manmade fibers** from Japan; and **asbestos cement pipe** from Japan.

OTHER AGENCIES

Treasury — Proposed Amendments to Antidumping Regulations: On April 18, Assistant Treasury Secretary Eugene T. Rossides announced a Notice of Proposed Rule Making amending Treasury's Antidumping Regulations.

The proposed changes are intended to insure that the Antidumping Act is made more effective in defending U.S. industry against unfair international trade practices in the dumping area, while at the same time providing complete fairness in antidumping investigations. With a view to speeding up antidumping investigations, the amendments would establish specific timetables for processing cases. Another amendment provides special procedures for accelerated renewal of an in-

vestigation which was previously discontinued on the basis of price assurances, where the Treasury has reasonable cause to believe that the assurances may have been violated. Still other amendments affect the technical adjustments which may be made in comparing the prices at which merchandise is sold abroad with those in the United States.

The proposed rules were published in the *Federal Register* on April 19. A period of 60 days is now being provided before final adoption of the proposed amendments in order to enable interested persons to submit comments. These should be addressed to the Commissioner of Customs, Washington, D.C. 20226.

Treasury—Dumping Cases: The Treasury Department announced recently the withholding of appraisement on **drycleaning machinery** from W. Germany, **hat bodies of fur** from Czechoslovakia, and **cast iron soil pipe fittings** from Poland. Under provisions of the Antidumping Act of 1921, the Secretary of the Treasury is required to withhold appraisement whenever he has reasonable cause to believe or suspect the existence of sales at less-than-fair value (LTFV).

In four other investigations, Treasury found sales at LTFV with respect to **welded-wire mesh** for concrete reinforcement from Belgium, and **hand pallet trucks** from France. Both cases have now been referred to the Tariff Commission to determine if U.S. industries are sustaining injury by reason of the LTFV sales. No sales at LTFV were reported in the case of **vinyl asbestos floor tile** and **railroad passenger vehicles,** both from Canada.

Since the last Official Trade Briefs (*Commerce Today,* April 17), Treasury has opened two new antidumping investigations to determine whether **pig iron** from Brazil and **record changers** from the United Kingdom are being sold in the United States at LTFV.

In another action, Treasury announced that its Antidumping Proceeding Notice relating to sulphur (published in the *Federal Register,* Feb. 24, 1972) is being amended to restrict its application to **elemental sulphur** only.

Treasury — Countervailing Duty Order: On May 2, Treasury issued a countervailing duty order against **compressors** and **compressor parts** from Italy. The new duties will become effective on June 17, 1972. Section 303 of the Tariff Act of 1930 requires the Secretary of the Treasury to levy a countervailing duty equal in amount to any grant or bounty which a country bestows on its exports to the United States. In the case of compressors, the subsidies vary from 0.4 cents per pound to 2.7 cents per pound. Compressor parts receive subsidies ranging from 1.1 cents per pound to 6.1 cents per pound.

Agriculture—Fruit and Vegetable Imports: On April 14, the Department of Agriculture lowered the minimum size requirements for imported **seedless grapefruit.** This revision was necessary to bring import regulations into line with amended domestic regulations under a Federal marketing order.

Labor—Adjustment Assistance: In late April, the Department of Labor announced the certification of approximately 125 workers at the Vermont Marble Co., Proctor, Vt., to apply for trade adjustment assistance. The latest action follows an evenly divided Tariff Commission report and a subsequent ruling by President Nixon that the domestic industry is threatened with serious injury by imports (see *Commerce Today,* Feb. 21).

International Trade Briefs

Foreign Dumping Actions: The Canadian Department of National Revenue has issued a preliminary determination of dumping of **vinyl-coated fiber glass insect screening** from the United States. The Canadian Antidumping Tribunal will now consider whether dumping has caused or is likely to cause injury to Canadian producers. Provisional antidumping duties were imposed on imports of screening from the United States effective May 1.

Nicaragua Regulates Agency Terminations

A new Nicaraguan law will significantly affect agency or distributorship agreements in that country. Law No. 287, effective Feb. 18, regulates the termination of agency agreements, and establishes rules for compensating local agents for the unjust termination of the agency-principal relationship. Generally, an agency, distributorship, or any other type of representative agreement may be terminated, or renewal denied, without compensating the dismissed agent when such action is taken for "just cause" (as defined in the law). However, termination without "just cause" render the principal liable to compensate the agent.

The new law prohibits the parties from electing foreign laws to govern the agency relationship. Copies in English of the law are available on loan from Foreign Business Practices Division, BIC-879, U.S. Department of Commerce, Washington, D.C. 20230.

Argentine Furniture Show To Be Held Sept. 15-Oct. 1

Argentina's Wood Producers Association is organizing an exhibition of furniture and related decoration items, to be held in the Exposition Center of Buenos Aires Sept. 15-Oct. 1.

The imported furniture market in Argentina is not especially large, but some U.S. firms may want to send representatives to seek out licensing opportunities or sell modern construction technology.

Write: Exposición Internacional del Mueble y la Decoración Cámara de Empresarios Madereros y Afines, Maza 578—Buenos Aires, Argentina. Attn: Sr. Carlos Aberastury.

GOVERNOR MEETS BANKER—*Mission Director Tom McCall (left) greets D. L. Millar, manager of Chartered Bank of Hong Kong. At center is Port of Portland's Jack Meier, whose Oregon group and the trade mission crossed paths in Hong Kong.*

Oregon Mission Reports Multiple Gains From Trade Tour To Far East

Oregon sent its Governor and a team of businessmen on a mission to the Far East recently. They brought back important trade news:

► Sales of the State's agricultural products—$108,000 in actual orders, and prospects in the next year of $2.8 million more.

► Reassurances in the vital Japanese and Korean markets that the West Coast dockstrike has not permanently hurt Oregon's sales there.

► Impetus to plans for a Pacific Rim Study Center in Portland.

► An arrangement to bring a Malaysian forestry team to Oregon, that could lead to Oregon participation in development of the South Asian nation's timberlands.

► The possibility of Japanese investment in production facilities in Oregon.

The agricultural products mission during a three-week period visited Japan, Korea, Hong Kong, Malaysia, Singapore, and Taiwan. Reporting later to 500 Oregon business leaders, Governor Tom McCall explained that the new Study Center, financed by both public and private sources, would serve to strengthen relationships between Oregon and potential trading partners across the Pacific.

S. M. Choi of the Korea Flour Mills Industrial Association told the Governor that Korea not only will resume purchases of Oregon wheat, but expects to increase its wheat buying from the State in 1973.

The mission found that, as a result of increased tourism in the area, demand for western foods is growing; the businessmen view Hong Kong and Singapore as good prospects for processed foods.

Seed-industry members of the group developed Japanese interest in using pelletized straw from Oregon grass seed fields as roughage in livestock feeds. Japanese buyers, expressing confidence in the quality of Oregon animals, inquired about buying 1,000 beef cattle.

Specific Oregon projects discussed as investment possibilities included food-processing and meat-packing plants producing for the Japanese market.

Foreign Exhibits To Have Special Hall At Tokyo Fair

U.S. firms are invited to exhibit their products at Tokyo's Tenth International Trade Fair next April 20-May 7. A special International Hall will house all foreign exhibits at the Fair. More than two million visitors are expected, including more than 12,000 foreign buyers, many of them from neighboring East Asian markets.

Applications for exhibition space will not be accepted until Sept. 11, but for more details on the show, write: Tokyo International Trade Fair Commission, 16-4 Harumi, Chuo-ku, Tokyo.

Iran Plans Building And Housewares Show In Sept.

Iran is mounting an International Building and Houseware Fair in Tehran, Sept. 14-29. The 19 categories of exhibits will include: civil engineering and road construction machinery, iron and steel materials, electrical equipment, telephones, drawing supplies, institutional furnishings, prefabricated buildings, paints, wallcoverings, heating and air conditioning items, appliances, china and ceramics, clocks, and interior decorating supplies.

Write: Iran International Fairs and Exhibitions Corp., Ministry of Economy, Tehran, Iran.

Mexico Pollution Control Show Seeks U.S. Firms

U. S. manufacturers of air and water pollution control and measurement equipment are invited to participate in the Second Annual Symposium and Exhibition of the Monterrey Institute of Technology Oct. 23-27, in Monterrey, Mexico. It is said to provide a substantial export opportunity to U.S. consulting firms, designers, or makers of such products.

Write: Prof. Edgar Beckley, I.T.E.S.M., Sucursal de Correos "J", Monterrey, Nuevo Leon, Mexico.

World Trade Actions

Canadian Policy On Foreign Takeovers Is Announced

The Canadian Government announced on May 2 its long-awaited policy on foreign investment by introducing legislation in the parliament which would establish a screening mechanism to rule on proposed foreign takeovers of Canadian controlled businesses. Prompt consideration by the Parliament is expected.

The legislation provides for governmental review of all proposed foreign takeovers of Canadian firms whose assets are valued at over $250,000 or whose revenues exceed $3 million. The Government would be given the authority to allow those takeovers considered to result in a "significant benefit to Canada" or to turn down those which do not. The review authority could negotiate with the proposed acquirer in cases where the Government believed terms more advantageous to Canada could be secured. Major guidelines are:

► Effect of the acquisition on economic activity in Canada, including employment;

► Degree and significance of participation by Canadians in the business enterprise and in any industry or industries in Canada of which it forms a part;

► Effect of the acquisition on productivity, industrial efficiency, technological development, product innovation and variety in Canada;

► Effect on competition within any industry or industries in Canada; and

► Compatibility of the acquisition with national industrial and economic policies.

The review authority will be under the jurisdiction of the Department of Industry, Trade and Commerce, and will report its findings to the Cabinet which will take the final decision. The review process will incorporate various safeguards including the right of the investor to present his case, final action to be taken not more than 90 days from the date of filing and a guarantee that information provided will be strictly confidential.

Acquisitions by Canadian investors will not be subject to review. It should be noted that the review process does apply to acquisitions by a foreign investor of a business in Canada that is already foreign controlled. The proposed law provides that there will be an acquisition (takeover) only through the purchase of shares of a corporation or by the purchase of assets used in carrying on a business. For the purchases of property, all or substantially all of the property necessary for the carrying on of the business will have to be purchased for control to be acquired. In the case of shares, the acquirer must have enough to control the company.

If a foreign investor holds less than 5 percent of the voting shares of a company whose shares are traded publicly, or less than 20 percent of the voting share of a private company, he will be considered not to have acquired control. If he holds between 5 percent and 50 percent he will have the opportunity, by the submission of evidence, to demonstrate that he does not have control.

The Canadian Government, coincident with its introduction of legislation on takeover, released a lengthy and detailed report on Foreign Direct Investment.

The report, prepared under the direction of Minister Herb Gray, discusses a broad variety of actions that the Government could take to control foreign investment. In a foreword to the report, however, the Government is careful to note that the report is not a statement of government policy nor does the Government endorse all aspects of the analysis contained in it.

Copies of the report may be obtained for $5 from Information Canada, 171 Slater St., Ottawa, Ontario.

Bangladesh: Import regulations which are designed to conserve foreign exchange while satisfying reconstruction and consumer needs have been announced. This will be accomplished through a government licensing system under which most import trading will be handled by a government trading corporation.

Liberia: The Commerce and Industries Registration Laws have been amended by the institution of a graduated scale of fees to cover all branches of a business enterprise, replacing the previous flat fee of $100 for each place of business. The new registration fees, payable annually to the Bureau of Revenues prior to the issuance of a Registration Certificate, are: $100 for sole proprietorships, $150 for partnerships, and $200 for corporations. The amendment took effect Jan. 1, and applies to both foreign and indigenous firms.

Japan: The Ministry of International Trade and Industry has issued a new regulation banning production, import, and use of equipment using a "closed" type application of polychlorinated bipheynyl (PCB) effective Sept. 1 (July 1 for heat exchangers), except for items from which PCB can be retrieved without causing environmental pollution. The new regulation follows an earlier ban on domestic use of "open" applications of PCB such as in duplicating paper, paints, and adhesives.

Calendar For World Traders

May 17—Atlantic City—World Trade luncheon, Holiday Inn Ballroom, noon.

May 17 — New Orleans — World Trade luncheon, Plimsoll Club, noon.

May 17—Kansas City—Seminar on How To Conduct Business With Japan, sponsored by REEC and Field Office.

May 18—Memphis—World Trade luncheon, Sheraton - Peabody Hotel.

May 18—San Francisco—World Trade Week luncheon, World Trade Club, Ferry Building.

May 18—St. Louis—Port of Mobile dinner meeting, sponsored by World Trade Club. Bel Air East, 6 p.m.

May 18—Kirksville, Mo.—Kiwanis Club World Trade luncheon.

May 18-19—Michigan City, Ind.—International Trade Conference, Howard Johnson Motor Lodge.

May 22 — Birmingham — Alabama World Trade Day observance, Civic Center.

May 22 — Philadelphia — World Trade Week luncheon.

May 22—Rochester, N.Y.—Sixteenth Tri-City seminar & dinner, Flagship Rochester Ballroom, 6 p.m.

May 23—Boston—Propeller Club dinner, Sheraton-Plaza Hotel.

May 23—Des Moines—Governor's Conference on Export Expansion, Johnny & Kay's Hyatt House Hotel, 9 a.m.-4 p.m.

May 23—Gardena Valley, Cal.—Chamber of Commerce's 5th annual World Trade Week seminar.

May 23—Granite City, Ill.—Rotary Club World Trade luncheon.

May 23—Hannibal, Mo.—Rotary Club World Trade luncheon.

May 23—Jasper, Ind.—Kiwanis Club World Trade luncheon.

May 23—Quincy, Ill.—Rotary Club World Trade luncheon.

May 23—St. Charles, Mo.—Kiwanis Club World Trade luncheon.

May 23—Vandalia, Ill.—Rotary Club World Trade luncheon.

May 23—Vincennes, Ind.—Rotary Club World Trade luncheon.

May 23—High Point, N.C.—Joint meeting of three World Trade Clubs, Downtown Holiday Inn, 6 p.m.

May 23—New York—World Trade Day luncheon, Plaza Hotel. Sponsors: Commerce & Ind. Assn. of N.Y., World Trade Club of N.Y.

May 24—Charlotte—World Trade Week reception, 6:30 p.m.

May 24—Evansville, Ind.—Civitan Club World Trade luncheon.

May 24—Hauppauge, N.Y.—Long Island World Trade Day luncheon, Colonie Hill.

May 24—Jasper, Ind.—Lions Club World Trade luncheon.

May 24—Jefferson City, Mo.—Lions Club World Trade luncheon.

May 24—Los Angeles—Maritime luncheon on Queen Mary sponsored by Propeller Club.

May 24—Milwaukee—Eighth annual Wisconsin International Trade Conf., Hotel Sheraton-Schroeder.

May 24—Minneapolis—Upper Midwest World Trade Conf., Radission Downtown Hotel.

May 24—Newark—World Trade Day luncheon, Robert Treat Hotel.

May 24—St. Louis—World Trade Week luncheon, Sheraton-Jefferson Hotel.

May 24—Stratford, Conn.—Combination Export Managers' Assn. of Connecticut luncheon, Stratford Motor Inn.

May 24-25—New York—Conference on international organizations, World Trade Center.

May 25—Atlanta—Georgia International Trade Assn.'s World Trade Week luncheon, American Motor Hotel.

May 25—Biloxi, Miss.—Governor's reception for international businessmen, Broadwater Beach Hotel.

May 25—Bloomington, Ind.—Kiwanis Club World Trade luncheon.

May 25—Boston—World Trade Day luncheon, Anthony's Pier Four Restaurant.

May 25—Cleveland—Seminars and World Trade luncheon, Statler Hilton Hotel.

May 25—Greensboro, N.C.—World Trade Week reception, 6:30 p.m. Sponsor: N.Y. Port Auth.

May 25—Hickory, N.C.—Export conference, Chamber of Commerce.

May 25—Honolulu—Hawaii World Trade Week luncheon sponsored by Propeller Club, World Trade Assn.

May 25—Little Rock—World Trade Week seminar, noon-4 p.m., Sheraton Hotel.

May 25 — Los Angeles — World Trade Week luncheon, Convention Center. Sponsor: Foreign Trade Assn. of Southern California.

May 25—Miami—Board of International Trade's World Trade Week luncheon, Marriott Hotel.

May 25—Oakland—Annual World Trade banquet, Jack London Square. Sponsor: World Trade Club.

May 25—San Francisco—World Trade & Travel Week luncheon, Room of the Dons, Mark Hopkins Hotel.

May 25—Vincennes, Ind.—Kiwanis Club World Trade luncheon.

May 26—Savannah—World Trade Week luncheon sponsored by REEC, and Maritime Day banquet sponsored by Propeller Club.

May 26—Springfield, Mo.—Chamber of Commerce Executives of Missouri annual conference. Topic: Importance of World Trade to Missouri.

Worldwide Business Services

International trade specialists in the Department of Commerce and Foreign Service Officers in the U.S. Embassies and Consulates around the world are continually developing specific commercial opportunities through which American companies can find buyers, agents, partners or investors overseas. One of the major means for communicating these opportunities promptly and accurately to the U.S. business community is through the columns of this magazine. The section that follows presents details about U.S.-sponsored overseas exhibits, licensing and joint venture proposals, opportunities to sell to foreign firms and government agencies and appoint agents, details on major construction and expansion projects, and notices of U.S. visits by foreign buyers.

U.S. Promotions Overseas

MEXICO. Food Processing Machinery and Equipment Exhibition. Imports of food processing equipment into Mexico climbed to $10.5 million in 1970, and are expected to reach $15 million by 1975. Expansion and modernization of this industry will present attractive opportunities to U.S. companies, which captured two thirds of all Mexican imports during the 1966-70 period. This is the most important market in Latin America for American food processing equipment manufacturers. Call Bob Vigneault, 202-967-4311. Mexico City Trade Center, Sept. 4-8.

JAPAN. U.S. Packaging Machinery Exhibition, TOKYO PACK '72. In 1970 U.S. exports to Japan of packaging equipment, including handling and conveying machines, came to more than $10.5 million. Changing retail distribution patterns have created new demands for sophisticated packaging machinery. The acute labor shortage has accentuated the need for greater efficiency in production techniques where packaging is an important factor. TOKYO PACK is unique in Asia as an international show-place for packaging equipment. Call Robert Levine, 202-967-4705. TOKYO PACK '72, Sept. 6-12.

WEST GERMANY. Air Conditioning and Refrigeration Equipment. The present yearly turnover for air conditioning equipment in Germany is estimated at over $200 million and is growing at about 20 percent per year. The commercial refrigeration market in Germany is about the same size and is estimated to be growing at 7 percent to 8 percent per year. With the realignment of currencies and the cut in German bank rates, there are signs that the German economic boom will resume by mid-1972. The accompanying increase in new construction will lead to increasing sales of air conditioning equipment. Rising per capita income in Germany is stimulating sales of prepared frozen foods and refrigerated dairy products, adding to a steady growth in demand for refrigeration systems. Call A. J. Beiring, 202-967-3838. Frankfurt Trade Center, Sept. 11-15.

FRANCE. Medical Diagnostic and Monitoring Equipment. Under the French Government's Five-Year Development Plan, new hospital construction and modernization of existing facilities will require purchase of considerable quantities of the latest diagnostic and monitoring equipment. The medical electronics market in France is projected at about $120 million by 1975. Call Don Johnson, 202-967-2795. Paris Trade Center, Sept. 18-22.

JAPAN. Vacuum and Cryogenics Equipment Exhibition. Increasing demand for U.S. high vacuum and cryogenics equipment and technology in the medical, electronics, biological and food preservation industries is predicted for Japan. Moreover, the Japanese Government is putting large sums of money and effort into aerospace and oceanography, industries which utilize high vacuum and cryogenics equipment. Market research reveals a continuing need for such equipment. Call Bill Dawson, 202-967-4919. Tokyo Trade Center, Sept. 18-22.

UNITED KINGDOM. Materials for the Electronics Industry. The final Kennedy Round tariff reductions and Britain's eventual entry into the Common Market are causing significant structural changes within the electronics industry. To remain competitive in domestic and foreign markets, electronics firms are upgrading their R&D programs and actively seeking new production techniques, materials, and applications. Consumption of electronics materials reached an estimated $160 million in 1970 and is projected to increase substantially in the next four years. Call George Kemp, 202-967-3088. London Trade Center, Sept. 18-22.

NORTHERN EUROPE. Data Processing Equipment. Three exhibitions will be staged between September 1972 and February 1973 to acquaint Scandinavian, United Kingdom and West German end-users with the latest equipment, accessories and software available in the United States. U.S. exports of EDP equipment to these three areas in 1971 totaled $382 million. Growth rates between 1969 and 1971 are dramatic: To Scandinavia—up 65 percent; to the United Kingdom—up 40 percent; to West Germany—up 66 percent. The first show, EDP-IV, in Stockholm, will involve equipment and software for all applications—business, process control, scientific research. The U.S. exhibition at COMPUTER '72 will emphasize business applications. The specialized Minicomputers show in Frankfurt also will cover the entire spectrum of EDP uses. Call C. Edward Walls, 202-967-4256. Stockholm Trade Center, Sept. 18-23 and Olympia, London, Dec. 4-8, 1972. Frankfurt Trade Center, Feb. 12-16, 1973.

ITALY. Plastics & Plastic Processing Equipment. Italy, the second largest plastic producer in Europe and one of the world's fastest growing consumers of plastics, is hosting the world's second largest plastics exhibition, a key vehicle for entrance into the entire European plastics market. Italian consumption of plastics has been growing at an average annual rate of 20 percent for the last five years; this is expected to continue. Call Robert Wallace, 202-967-4508. U.S. Commercial Exhibition, PLAST '72. Milan, Oct. 8-15.

UNITED KINGDOM. U.S. Packaging Exhibition, PAKEX 72. British consumption of packaging machinery and equipment was $81.5 million in 1970; by 1975, it will be an estimated $112 million. British imports of packaging machinery in 1970 totaled $31.9 million, of which $8.3 million came from the United States. British demands will increase rapidly for sophisticated, high-speed machinery. U.S. equipment is well regarded. Call Bill Gaines, 202-967-4073. PAKEX 72, Oct. 9–13.

WEST GERMANY. Analytical Instruments. The outlook for the German chemical industry is for 70 percent growth in production by 1975. The $35 million market for analytical instruments has doubled in volume since 1968. Expenditures for R&D continue to keep pace with industry growth. Outlays by the chemical industry currently account for an estimated 30 percent of R&D expenditures by all German industry. Call John R. Crown, 202-967-4421. Frankfurt Trade Center, Oct. 9-13.

ITALY. Metals, Metal Processing and Production, and Technical Metallurgy Equipment. Italy's 1972 market for this equipment is valued at $273 million and domestic producers are expected to satisfy less than half. Consequently, technologically advanced and other locally unavailable equipment and supplies will be imported. U.S. high technology equipment and materials are considered by most Italian experts to be 5-7 years ahead of most available products and are therefore in high demand. Call Gus Duda, 202-967-2434. Milan Trade Center. Oct. 10-14.

CZECHOSLOVAKIA. Brno International Fair—Romania, Bucharest International Fair. Czechoslovakia and Romania have both undertaken Five-Year Plans (1971-75) which concentrate on the modernization and expansion of their industrial economies. To achieve these modernization programs both countries are greatly interested in purchasing instruments and instrumentation equipment of the highest quality in the most advanced technology.

U.S. participation in the Brno and Bucharest events will focus on scientific instruments and electronic testing equipment. Exhibiting at these events will provide an opportunity for U.S. firms to take advantage of these markets. Call James Robb, 202-967-4161. Brno International Fair, Sept. 8-17. Bucharest International Fair, Oct. 15-24.

ARGENTINA. Instrumento Expo-72. This will be an instrument and systems exhibition. Featured equipment will include industrial process, analytical, and electro measuring instrumentation. Argentina's imports of instruments and systems reached a record $19 million during 1971, with U.S. suppliers accounting for some 50 percent. By 1975, import demand is expected to double, as local producers will still be unable to produce sophisticated instrumentation required by Argentina's rapidly growing process industries; total instrumentation sales, including imports, should surpass $46 million by 1975. Call Franc Manzolillo, 202-967-3752. U.S. Regional Trade Center, Buenos Aires, Oct. 16-20.

MEXICO. Graphic Arts Machinery and Equipment Exhibition. The printing and graphic arts industry in Mexico is upgrading its capabilities and looks to the United States as the primary source for new equipment. U.S. sales were $8.8 million in 1970, and rose 10 percent in 1971. A wide range of equipment will be featured at this event in the most important Latin American market. Call James L. Blow, 202-967-4311. Mexico City Trade Center, Oct. 16-20.

SWITZERLAND. Nuclear Equipment. The application of nuclear technology for industrial, medical and scientific purposes is one of Switzerland's fastest growing and most promising fields. As commercial applications of nuclear technology become more widespread, the market for nuclear equipment and instruments will expand. Sales of nuclear equipment are rising as the industrialized countries of Western Europe expand their activities in this field. Call John Wolf, 202-967-4974. U.S. Commercial Exhibition, NUCLEX '72, Basel, Oct. 16-21.

TAIWAN. Industrial, Business and Scientific Equipment Exhibition. This will be the third exhibition of its type to be held in Taiwan. At the Exhibition in 1970, 50 U.S. manufacturers sold $516,515 worth of equipment during the show and forecast over $12 million in sales within two years from sales contacts made at the exhibition. The United States is Taiwan's second largest supplier with over 30 percent of its total U.S. $1.8 billion import market. Call Don Ryan, 202-967-3137. U.S. Commercial Exhibition, TAIPEI '72, Taipei, Oct. 16-21.

VENEZUELA. Advanced Business Machinery. Venezuela, with a $10 billion GNP and a 6 percent annual growth rate, is one of the leading Latin American markets for U.S. equipment. Demand for business machines is high. The U.S. share of the market for EDP and other business machines is 35 percent and is expected to keep pace with market growth of about 12 percent annually. The Venezuelan liquidity position is good. Call Porter Clary, 202-967-4652. U.S. Solo Exhibition, Caracas, Oct. 24-28.

SCANDINAVIA. Metal Parts Production Equipment. Metalworking is Sweden's largest industry. This manufacturing group has grown faster than any other in Sweden. Expanded U.S. exports are possible, because Sweden's metalworking industries are continuing efforts to achieve greater efficiency, supported by current investment in new metal parts production equipment estimated at $93 million. Related Swedish import duties average only 5 percent ad valorem; the 7.5 percent revaluation of the krona vis-a-vis the dollar will further improve the competitiveness of such American goods. These factors should boost the U.S. share of this $60 million import market, to which American equipment manufacturers supplied goods worth $10 million in 1971. Call Robert Dormitzer, 202-967-3848. Stockholm Trade Center, Nov. 6-11.

UNITED KINGDOM. Electro-Optics & Laser Equipment. Opportunities are increasing for U.S. suppliers. Equipment demands for R&D applications are growing, but even bigger gains, and the best opportunities for U.S. companies during the next several years, are appearing in industrial sectors. Market size estimates range as high as $10 million by the end of 1972, with growth estimated at 15-20 percent or more. Call your nearest U.S. Department of Commerce Field Office. London Trade Center, Nov. 13-17.

JAPAN. Industrial Assembly Equipment and Supplies. Japan's "recession" is bottoming out and business activity gradually picking up. The ceiling on loans for import financing was raised on April 1 from 20 percent to 50 percent, in effect making it easier for Japanese businessmen to import goods from abroad, including the U.S. These developments, plus a favorable market research report on industrial assembly equipment, are encouraging to U.S. exporters. Call Maurice Shea, 202-967-4511. Tokyo Trade Center, Nov. 13-18.

WEST GERMANY. Information and Document Storage and Retrieval Equipment. The market for this equipment in Germany is growing fast. From 24 percent in 1968 the growth rate rose to 42 percent in 1969, 50 percent in 1970, and an estimated 60 percent in 1971. Currently, domestic producers supply only 30 percent of German demand while the U.S. supplies 60 percent. Since 1965 it has been legal in Germany to use microfilm as a replacement for almost all original documents. This exhibition is being held in conjunction with the European Microfilm Congress. Call Lee W. Swift Jr., 202-967-4461. Mainz, Nov. 14-16.

ITALY. Pollution Control Equipment. The Italian Government, in its most recent Five-Year Plan (1971-75), has allocated $3.5 billion for pollution abatement. For 1972 Italy's water and air pollution control equipment market is valued at $300 million. Additionally, strict legal actions during 1971 along with a growing public outcry against mounting pollution has created a strong buying interest among Italian municipal and industrial decision makers. Research indicates that pollution control equipment has not been exhibited sufficiently in the country. Consequently, the U.S. Trade Center, located on the Milan International Fairgrounds, will host 30-35 U.S. firms in conjunction with Italy's largest antipollution exhibition, ANTINQUINIMENTO '72. Contact Don Johnson, 202-967-2795. Milan Trade Center, Nov. 15-19.

WEST GERMANY. Electronica '72. The U.S. Department of Commerce exhibit in the biggest electronics show in the world will feature production equipment for the electronics industry, measurement and test equipment, and electronic components. Indicators point to a 10 percent or better annual rate of increase in the European electronics market through the rest of the seventies. In West Germany, the largest of the European electronics markets, forecasts are upward for 1973. ELECTRONICA '72 gives U.S. electronics manufacturers an opportunity to exhibit for this market as it starts to expand again. Call Don Schmadel, 202-967-4601. Munich, Nov. 23-29.

Space Fully Booked

The following exhibitions and trade missions in which all exhibit space has been reserved are still open for visits by interested industry representatives. U.S. firms with sales representatives in these market areas may wish to ask them to investigate the shows.

Advanced Business Equipment, Mexico City Trade Center, June 5-9; Passive and Electromechanical Electronic Components, Frankfurt Trade Center, June 12-16 ; Micrographics Equipment Exhibition, London Trade Center, June 19-23; Bangkok 72 Construction Equipment & Building Products Exhibition, Bangkok Trade Center, late June.

Sales opportunities in 9 U.S. commercial exhibitions, trade fairs and solo exhibitions and 16 shows at the nine U.S. Trade Centers are being offered to present and potential U.S. exporters between now and February 1973.

Each Trade Center exhibition is limited to one particular line of products and centers are located in Buenos Aires, London, Milan, Mexico City, Frankfurt, Stockholm, Sydney, Tokyo and Paris. For further information on the Trade Center shows described or for more facts on U.S. exhibitions, write: *Foreign Export Promotion, BIC-936, U.S. Department of Commerce, Washington, D.C. 20230.*

Trade missions are groups of U.S. businessmen organized to travel abroad promoting the export of U.S. goods and services made by their particular industry. **Write:** *Trade Missions Div., BIC-926, U.S. Department of Commerce, Washington, D.C. 20230.*

Licensing, Investment Abroad

Information on projects to be promoted at the June 19-23 investment meeting in Beirut, sponsored by the Government of Lebanon and the United Nations Industrial Development Organization (UNIDO), is now available in the United States. Individual project sheets together with registration forms and country information may be obtained from Robert Cox, UNIDO, United Nations, New York, N. Y. 10017. In ordering project sheets stipulate commodities and project numbers shown in parentheses.

2015 — Equity, loan/supplier's credit, know-how, marketing and management assistance to establish **egg dehydration facility** (LEB-04).

2030—Cultivation and industrial utilization of **fruit from locust trees.** Equity, loan/supplier's credit, know-how and management help desired (LEB-09).

2030 — Equity, loan/supplier's credit, know-how, marketing and management assistance to expand production of **canned vegetables and pickles** (LEB-01).

2032 — Equity, loan/supplier's credit, know-how, marketing and management aid in starting **babyfood plants** (LEB-05).

2033 — Equity, loan/supplier's credit, management and marketing assistance to produce **apple juice concentrate** and other products (LEB-06).

2034 — Equity, loan/supplier's credit, know-how, management and marketing assistance to establish **fruit dehydration facility** (LEB-03).

2034 — Equity, loan/supplier's credit, know-how, marketing and management assistance to establish **vegetable dehydration facility** (LEB-02).

2042 — Equity, loan/supplier's credit, know-how, management and marketing assistance to establish **animal feed facility using torula yeast** (LEB-08).

2060—Equity, supplier's credit to establish **plant to extract sugar** from sugar beets and refine raw sugar (LEB-07).

2283—License/know-how to produce **machine-made, Persian-type carpets.** Foreign participant to contribute $500,000 loan (LEB-44).

2300 — Manufacturer **ladies' and children's garments** wants to expand production. License or sub-contracting arrangement and marketing assistance is desired. Equity possible. (LEB-13).

2441—Produce **wooden fruit boxes,** annual capacity 4 million. Needs financial, technical assistance. Makes particle board, chipboard panels. (LEB-32).

2500 — Expand production of **modern household and office furniture.** Experienced company. Seeks capital. (LEB-33).

2500 — Expand **furniture facility** into mass production operation. Lebanon's largest furniture plant. Seeks licenses, managerial assistance. Has export markets. (LEB-34).

2621 — Joint venture to manufacture **wrapping paper, toilet tissue, paper towels.** Expand present production of cardboard, packaging materials. Seeks capital, technical assistance. (LEB-35).

2649—Expand **manufacture of notebooks.** Operating full capacity. Exports to Middle East, W. Africa. (LEB-36).

2819—Technical and financial collaboration for $5.4 million facilities for **mining and beneficating phosphate rock.** Reserves estimated at 20 million metric tons (LEB-14).

2834—License to produce **serum for intravenous feeding.** Would import dextrose. Market domestically, possibly export (LEB-41).

2842—Manufacture **aerosol products** like insecticides, hairsprays. Has machinery. Needs technical know-how (LEB-43).

3079 — License manufacture **thick, clear and opaque acrylic sheeting.** For furniture, advertising displays. Annual capacity 1,100 tons (LEB-28).

3079 — License to manufacture **thick gauge plastic sheeting.** Makes wall and ceiling panels, acrylic sheets. (LEB-27).

3079 — **Produce polyethylene containers** for transporting bottles, other plastic products. Makes plastic bags, sanitary ware (LEB-25).

3111—Seeks supplier's credit, management and marketing assistance to expand **tannery** to double production of 5,000 sheep and goat skins into leather grain. Expand to handbags and garments. Subcontracting also sought (LEB-37).

3141—License/know-how to expand **ladies' footwear** production. Has five retail outlets (LEB-40).

3171—Joint venture to expand **handbag production.** Loan/supplier's credit, management and marketing assistance desired. Project cost $250,000 (LEB-38).

3199—Equity, loan/supplier's credit, management and marketing assistance to produce **leather garments** (LEB-39).

3281—Equity and loans or supplies credits for **marble cutting and polishing** machinery. Expansion would triple marble production (LEB-16).

3295—Equity and know-how for **quarrying of silica sand** and construction of benefication plant (LEB-15).

3362—Marketing and/or sub-contracting partner to generate export sales for iron foundry producing **bronze, brass and chromium plated brass articles, valves, tubes and sanitary hardware** (LEB-18).

3442—Know-how and/or license for expansion and diversification plant manufacturing **aluminum and steel windows, doors, shop fronts, mechanical and electrical systems** (LEB-19).

3452—Licenses or technical know-how for $400,000 plant to produce **iron and steel products** such as nuts, bolts, chains, drums (LEB-17).

3531—Expand production of **construction equipment.** Needs capital; managerial and technical know-how. Makes concrete mixers, tower cranes. (LEB-20).

3555 — Produce **engraving cylinders, plastic bottle caps, polyethylene film.** Seeks capital, licenses. Makes plastic products (LEB-26).

3561—Joint venture expand manufacture **vertical turbine pumps.** Exports 90% of output. Seeks $350,000, offers minority participation (LEB-22).

3589 — Manufacturer **water treatment equipment** wants to expand. Add products like turbines, irrigation pumps, desalination equipment. Seeks licenses, financial participation (LEB-23).

3600—Manufacturer of **electric lighting fixtures and equipment** seeks $400,000 loan or supplier's credit and technical know-how, licenses and managerial assistance in establishment plant for expansion (LEB-24).

3692—Establish plant to manufacture **dry batteries.** Investment estimated at $330,000. Seeks financial participation and technical know-how but could arrange financing (LEB-42).

3713—**Truck, bus and trailer body manufacturer** seeks $200,000 loan or supplier's credit plus technical know-how for plant to expand operations (LEB-21).

3999 — Plant to produce **paper book matches** for publicity purposes. Seeks equity or loan of $350,000, marketing and management assistance (LEB-31).

Licensing In U.S.

For additional information on opportunities to manufacture foreign firm's products in the U.S., write Commerce's Office of International Investment, BIC-874, Bureau of International Commerce, Department of Commerce, Washington, D.C. 20230, telephone Area Code 202-967-2248 referring to the appropriate FILE number assigned each opportunity listed below.

AUSTRIA—An established firm is interested in licensing an American manufacturing firm to produce and sell in the U.S. their **large containers and silos made from glass-fiber reinforced plastics materials. File 2178.**

Licensing and investment proposals from foreign firms are listed in these columns. Specific product interests in each proposal are highlighted in bold type to facilitate identification and each proposal is preceded by the appropriate four-digit product number taken from the Standard Industrial Classification (SIC) Manual.

Background information on opportunities abroad and assistance on overseas investments are available from the Office of International Investment, BIC-878, U.S. Department of Commerce, Washington, D.C. 20230. "P" numbers should be used when responding to specific proposals.

WTD indicates that a World Trade Directory Report containing financial and background information on the foreign firm is available for $2 from the Department of Commerce, BIC-976, Washington, D.C. 20230, or from any Commerce Field Office.

FRANCE—A manufacturer wishes to locate a U.S. firm interested in manufacturing under license its **high power blinker light,** featuring four colored lenses; 100% static (silicon semi-conductor); and all material is self-extinguishing plastic. The blinker provides a flash every three seconds, of three kw brilliance with a consumption of less than three watts. **File 2179.**

GERMANY—A firm desires manufacturing license arrangements with an American firm for its **pipe end grinding machines, automatic tube and expanding and beading devices, and automatic safety coupling** for conventional self-activating tube end expanders. Reportedly, the end grinding machinery is not produced anywhere else in the world. This equipment purportedly replaces the welding system of pipe ends in the manufacture of high pressure boilers, heat exchangers, oil-coolers, and similar applications. **File 2180.**

SWITZERLAND—An established Swiss manufacturer wants a U.S. licensee to produce its **modern office furniture.** They also offer a modern **integrated work station for typists.** Reportedly, the anatomically correct sitting of the chairs is based on systematic research in the field of work physiology. In addition to its factories in Switzerland, Germany, Belgium and Brazil, the firm works through local agents in a number of European and overseas countries. **File 2181.**

SWITZERLAND—A manufacturer of **special lacquers for the internal coating of aluminum and other metal packagings** offers manufacturing license and formulas to a U.S. manufacturer. These lacquers are used by the cosmetics, pharmaceutical and food industries, especially for tube packagings. The main advantages are resistance against acids, scratch proofness and extremely high flexibility. **File 2182.**

SWITZERLAND—A firm specializing in auxiliary machinery and devices for the paper industry offers manufacturing licenses for three types of **auxiliary equipment mainly used for the handling of heavy paper rolls:** pneumatic expansion winding shafts for fast tightening and release of paper, textile, plastic and metal-foil rolls; tilting bearings which can be added to any type of machinery for the easy and quick change of rolls; hydro-winders with automatic adaptation of the operating speed and winding tension, also for paper, textiles and foil rolls. **File 2183.**

SWITZERLAND—A well-known firm in the field of transparent packagings offers manufacturing licenses for their full line of **hydraulic presses and related auxiliary machines for the manufacture of transparent acetate, cardboard and metal packages.** Included are: several types of programmable, semi-automatic and hand-operated hydraulic presses with working pressures from 1 to 140 metric tons. The automatic high speed presses can perform up to 1600 packagings per hour. They also offer auxiliary machines and equipment for the manufacture of fancy transparent packages. **File 2184.**

SWITZERLAND — A reputable firm would be interested in making manufacturing arrangements to have their **dust collecting and air purification apparatus and filters** made in the U.S. under license. The firm claims that the machines achieve an average of 98% filtration. The polluted air is rushed into the machine and filtered against water vapor; removable and interchangeable secondary plastic filters complete the job. Optional filters can be added. Various sizes for different filtering jobs are available. The firm also operates in France, Germany and Austria. **File 2185.**

NETHERLANDS — A patent attorney's bureau is interested in having a **new type of vacuum frier for potato products** manufactured under license in the United States. The process and the vacuum frier were developed by the Institute for Storage and Processing of Agricultural Produce at Wageningen. Both the frier and the process are designed to avoid the brown discoloration of certain fried potato products, while removing the last percentages of moisture at temperatures below 100 degrees C. under reduced pressure. **File 2186.**

SWITZERLAND — A newly established firm offers a license for manufacturing in the U.S. an **anti-skid device for tires** to drive safely on snow, ice, mud or sand-covered roads. The product is an aluminum shell which is screwed onto the drive wheels to replace conventional hub-caps, allowing the use of normal tires through the year. A rubber ring affixed on the shell around the wheel's rim maintains seven to eleven T-shaped hooked steel bars, each mounted on two springs and hinges. The hooked bars are spaced around the tire so that two claws always touch the road surface. The manufacturers have tested the device over seven winters under rough conditions on Swiss mountain roads. **File 2187.**

Visiting Buyers And Officials

INDIA—Kamal Nath, Senior Executive, Electrical Manufacturing Co. Ltd., EMC Gardens, 136 Jessore Rd., Calcutta 55, West Bengal, interested in U.S. collaboration for the manufacture of **cross-linked polyethylene insulated cables** and requesting technical information. May 15 via New York for one month c/o Hotel Americana, 801 7th Ave., New York, N.Y. 10019. Itinerary: New York City, Utica, Cleveland, Richmond, Va., Los Angeles. WTD 3/64 on Electrical Manufacturing Co. Ltd. and 6/69 on EMC Projects Pvt. Ltd. under revision.

IRAN—Large manufacturer of rubber plastics and adhesives, desires contacts for purchasing **fully integrated plant for manufacture of polyvinyl acetate emulsions from monomers** for 1,000 to 2,000 gallons capacity. Manuchehr Afari, 10 Elizabeth Blvd., Tehran. From May 7 to May 25. c/o Dr. Pirnazar, 1438 A Carol St., Park Ridge, Ill. 60068.

ISRAEL—A. Nivy, owner and manager, A. Nivy Representatives Ltd., P.O. Box 39223, Tel Aviv, interested in exclusive agencies for **electronic components, systems, hardware and related equipment for electronic and aircraft industries,** and requesting technical information. May 9-11 via New York for three weeks. c/o Harbor Sales Co., P.O. Box 37, Royal Oak, Mich. 48068. Itinerary: New York, Detroit, Arizona, others as required. WTD in preparation.

NIGERIA—Adeyola Balogun, International Media Associates Ltd., 23/25 Martins St., Lagos, interested in **advertising agency business.** May 15 via New York for two weeks, c/o Mr. Herwood, *New York Times,* Printing House Square, New York, N.Y. 10036. Itinerary: New York, Washington, D.C., Chicago. WTD in preparation.

NORWAY—Vidar Warness, Sales Engineer, Anton G. Rosenberg, Neumannsgate 15, 5000 Bergen, interested in agencies for **electronic components.** April 18 via Seattle for three months. c/o 7712 Meridian N., Seattle, Wash. 98103. Itinerary: to be arranged. WTD 9/71.

THAILAND—Sombat Laohapongchana, Vibool Supply Ltd., 222/18-19 Plaboplachai Rd., Bangkok 1, interested in visiting plants manufacturing **gate valves, globe valves and check valves** and in buying machinery and equipment for manufacture of these products in Thailand and requesting technical information. May 3 via New York for 20 days. c/o Miss Umporn Ratana, F.D.U. Box 110, Teaneck, N.J. 07666. Itinerary: New York, New Jersey. WTD in preparation.

Other Foreign Official Tenders

COLOMBIA—The Bogota Water Works and Sewer Company has issued a tender for **one distance recording meter (odometer); 30 theodolites and complementary elements; and 29 level gauges and various elements.** Offers should reach the Direccion del Plan Maestro de Acueductos, Carrera 40, No. 22B-60, Third Floor, Bogota, Colombia before 4:00 p.m., June 12. Specifications may be examined and purchased from the above address for 2,500 non-refundable Colombian pesos for the first copy, and 500 Colombian pesos for each additional copy ($1=21.5 pesos). No tender specifications are available from the Department of Commerce .

INDIA—The Uttar Pradesh State Electricity Board has issued Tender No. IDA/UPSES/16 for the supply of **power line carrier communications equipment.** Bid deadline is June 23. Bid should offer items such as line traps, coupling capacitors, coupling units, telephone sets, and relays. Copies of tender announcement and specifications are available from the Superintending Engineer, Electricity Substation Design Circle, Uttar Pradesh State Electricity Board, 10-B Madan, Mohan Malviya Rd., Lucknow-1, Uttar Pradesh, or on a short-term loan basis to firms located in the U.S. from the Communications-Electronics Division, BDC-720, Room 1112, U.S. Dept. of Commerce, Washington, D.C. 20230, ★(202-967-4822).

MALAYSIA—The Director General of the Malaysian Meteorological Service has issued a tender for **seismographs, amplifiers, recorders, chronometer, microseismographs and programmers.** Offers should reach the Ketua Setiausaha, Kementerian Pechubongan, Jalan Gurney, Tingkat 4, Pejabat Kerajaan, Kuala Lumpur, Malaysia, no later than June 5. Copy of the tender is available for *review only* at the Business, Photographic and Scientific Equipment Division, BDC-708, Room 1128, U.S. Dept. of Commerce, Washington, D.C., 20230 ★(202-967-2939).

Foreign Trade Opportunities

These trade opportunities are based on reports received from the U.S. Foreign Service by the Business Opportunities Staff and other units of the Bureau of Domestic Commerce (BDC), U.S. Department of Commerce, Washington, D.C. 20230. The commodities in which foreign firms have interest are indicated by the five-digit numbers and commodity classifications which are from the Standard Industrial Classification (SIC) Manual and the Numerical List of Manufactured Products, 1967 Census of Manufacturers, used extensively by Government and industry.

U.S. firms should be aware that the listing in Commerce Today *of opportunities to trade in specific commodities and technical data does not necessarily imply approval of their export by the Department of Commerce pursuant to the Export Administration Act of 1969. Applicable export licensing regulations must be followed.*

Every effort is made to include only firms or individuals with good reputations. However, the Department cannot be responsible for any trade relations.

The mark (●) indicates that this trade opportunity is a request for bids by a foreign government agency. A (★) at the end means that additional information may be borrowed by U.S. firms from the individual division of BDC. To avoid delays, requests for loan material should specify the country, commodity and foreign government agency.

WTD indicates that a World Trade Directory Report containing financial and business background information on the foreign firm is available for $2 from the U.S. Department of Commerce, BIC-976, Washington, D.C. 20230.

Direct Sales

Specific foreign firms have expressed interest in direct purchases of the products below. See also the "Agencies" listing.

Miscellaneous agriculture

01920 — PAKISTAN — Seeds; vegetable, flower. Ch. Salamat Ali & Sons (importer, dist., mfr.), New Sabzi Mandi, Sheikhupura Rd., P.O. Box 28, Gujranwala. WTD 4/72.

Special Trade Contractors

17990—LIBYA—Construction of battery and a light bulb factory. Anwendung Deutscher Verfahrens (D.V.T.) (construction), Mr. Osama Marci, P.O. Box 3181, Tripoli. WTD in prep.

Canning, preserving foods

20310 — GERMANY — Salmon roe in buckets of 20 kilograms net; 50 or 100 gram glasses; first quality; quantity 2,000 kilograms every six mo. beginning with new catch fall 1972. Altonaer Kaviar-Importhaus Max Schuldt (importer), Postfach 50-01-07, 2 Hamburg 50, Altona, Schmarjestrasse 44. WTD in prep.

Beverage industries

20853—AUSTRIA — Bourbon whiskey, brand-names only. H. Polacek (importer, agent), Greiseneckergasse 10, A–1200 Vienna. WTD in prep.

20860—AUSTRIA—Fruit drinks made of natural fruit juices, not frozen, bottled or canned. H. Polacek (importer, agent), Greiseneckergasse 10, A–1200 Vienna. WTD in prep.

Broad woven fabric mills, cotton

22112—FRANCE — Cotton twills, drills, grey goods weighing 250 to 300 grs. per sq. m., suitable for men's, women's work clothing. Needs 20,000 to 60,000 meters of above fabrics on regular monthly basis. Requests offers with samples for quality appraisal. Sapivog (mfr.), Boîte Postale 88, 88 Epinal. WTD in prep.

22116 — BELGIUM — Corduroy fabrics, cotton; velvets, velveteen, broadwoven, not printed. Requests catalogs, samples showing colors, different qualities. Etablissements Jurot S.A. (importer, mfr.), 12-16 Rue de l'Autonomie, 1070 Brussels. WTD 4/72.

22117 — FRANCE — Cotton twills and drills, blue (Hydron color), 250 to 300 grs. per sq. m., suitable for men's, women's work clothing. Requests 20,000 to 60,000 meters of above fabrics on regular monthly basis. Requests offers with samples for quality appraisal. Sapivog (mfr.), Boîte Postale 88, 88 Epinal. WTD in prep.

22118—JAMAICA—Cotton sheets, pillowcases. Brochures, quotations requested. Lee's Enterprise (importer, agent, retailer), 58 Princess St., Kingston. WTD in prep.

Broad woven fabric mills

22216 — ZAMBIA — Nylon lining for pocket trimming; suit trimming. Piper Clothing Ltd., Attn: Mr. Gabriel Radson, Mgr. Dir. (importer, mfg.), P.O. Box 1906, Ndola. WTD in prep.

22218 — FRANCE — Finished manmade fiber fabrics: acrylic, crylor, other textiles for manufacture of paint rollers. Flament S.A. (dist., mfr., exporter), 174, av. du General de Gaulle, 02–La Capelle. WTD in prep.

Dyeing, finishing textiles

22629—ZAMBIA—Weft yarn for blanket manufacture; coarse yarns made from pure spun rayon staple fibre; count of two principal yarns 500 yds. per lb. and 1,000 yds. per lb.; respective metric designations tex 992 and tex 496. Zambia Textiles Ltd., Attn: C. G. Gleason, Gen. Mgr. (importer, mfr.), P.O. Box 204, Livingstone. WTD in prep.

Floor covering mills, products

22710—CANADA—Floor coverings, carpets. Riteman's Ltd. (importer, dist.), 179 Duckworth St., St. John's, Newfoundland. WTD in prep.

22710—GERMANY—Woven wall to wall carpet flooring for hotels. Direct purchase & agency. Behogast Hotelberatung und Belieferung GmbH & Co. KG. (importer, dist., agent), 117-119 Rhoenstr., 6000 Frankfurt/Main 60. WTD 4/72.

22720—GERMANY—Tufted wall to wall carpet flooring for hotels. Direct purchase & agency. Behogast Hotelberatung und Belieferung GmbH & Co. KG. (importer, dist., agent), 117-119 Rhoenstr., 6000 Frankfurt/Main 60. WTD 4/72.

Textile goods

22950 — SWITZERLAND — Fiberglass coated insulating tapes, with tar or asphalt. Direct purchase & agency. Gétaz, Romang, Ecoffey S.A, Attn: Mr. Martinet (importer, dist., mfr.), rue des Terreaux 21, 1000 Lausanne. WTD 4/72.

Men's, boys' furnishings

●23200—ETHIOPIA—28,000 field jackets (M-65). Bids must reach Central Procurement Office, Ministry of National Defense, Imperial Ethiopian Govt., P.O. Box 3811, Addis Ababa, before 1 p.m., June 1. Specifications available from Office of Textiles, DIB-300, U.S. Dept. of Commerce, Washington, D.C. 20230 ★(202-967-5153).

23291—ETHIOPIA—Military field jacket (M-65) U.S. Spec. Mil-C-43455, 28,000 in various sizes. C.i.f. quotations Djibouti or Asmara desired. Sample swaths to be included with offer. SABA Trading Co. (Private) Ltd. (importer), Adi Ugri St. 11–13 or P.O. Box 367, Asmara. WTD in prep.

Women's, misses', outerwear

23393 — NETHERLANDS — Women's, misses', juniors' sportswear. Exclusive representations. N.V. v/h D. Dröge Zonen (importer, dist., agent), 10 Zuiderdiep, Groningen. WTD 4/72.

Miscellaneous apparel, accessories

23811 — SWITZERLAND — Ski gloves, mittens, leather-and-fabric combination, other sport gloves, including mountain climbers' gloves. Wollgarn Aktien Gesellschaft (importer, dist.), Hardturmstr. 127, 8037 Zurich. WTD 4/72.

23860—NORWAY — Leather garments for motor cyclists. Moped-Spesialisten A/S Pe-Ko (importer, agent), Fred. Olsensgate 3, Oslo 1. WTD 4/72.

Fabricated textile products

23920 — NETHERLANDS — Housefurnishings. Exclusive representations. N.V. v/h D. Dröge Zonen (importer, dist., agent), 10 Zuiderdiep, Groningen. WTD 4/72.

23940 — ZAMBIA — Collapsible canvas water tanks: 500, 7 ft. 3 in. x 2 ft. 6 in.; 1,000, 10 ft. x 2 ft. x 6 ft.; 2,000, 14 ft. x 2 ft. x 6 ft. Gourock Ropes & Canvas (Zambia) Ltd. (importer, mfr.), P.O. Box 467, Ndola. WTD in prep.

Paper mills

● **26200—BURMA**—Cement Mills, Industrial Development Corporation requires 1,100 metric tons of unbleached kraft bag paper and 10 metric tons of crepe paper tape for making cement bags. The bag paper is to have substance of 80/85 grams/M^2 and be supplied in reel widths of 1,035 MM. The crepe paper tape is to have substance of 115/130 grams/M^2 and be supplied in reel width of 55MM. First shipment is to be scheduled for October, 1972. Copies of tender containing full specifications and conditions are available from Forest Products Division, BDC, Room 2113, U.S. Department of Commerce, Washington, D.C. 20230. ★ (202-967-3534). Bid deadline is June 10.

26219—ISRAEL—Abrasive paper for car-paint jobs. S. Estlein Ltd. (importer, dist. wholesale, retailer from stock), 45 Arlozoroff St., Ramat-Gan. WTD in prep.

Converted paper, paperboard products

26410 — SWITZERLAND — Adhesive tapes for office use, novel labels, similar items. Direct purchase & agency. Carfa AG, Attn: Mr. H. Gfeller, Production Mgr. (importer, dist.), 8805 Richterswil. WTD in prep.

Synthetic materials

28211 — FRANCE — Polyvinyl chloride film for food packaging with stabilizers, additives to preserve foods. Direct purchase & agency. C.I.T.E.C. Compagnie Internationale de Technique et de Chimie (importer, agent), 16-18 rue Budé, 75–Paris 4. WTD 1/72.

28214—FRANCE—Special adhesives (in bulk). Direct purchase & agency. C.I.T.E.C. Compagnie Internationale de Technique et de Chimie (importer, agent), 16-18 rue Budé, 75–Paris 4. WTD 1/72.

Drugs

●**28300 — ZAIRE** — 19 items, including chloramphenicol—3,500,000 capsules of 0.25 gram base, packed in 140 cases, each case containing 250 bottles, each bottle containing 100 capsules; ampicilline—1,000,000 capsules of 0.25 grams, packed in 40 cases, each case containing 250 bottles, each bottle containing 100 capsules; tetracycline—3,000,000 capsules corresponding to 0.25 gram tetracycline HCl, packed in 120 cases, each case containing 250 bottles, each bottle containing 100 capsules. Tender No. 109/72, bid deadline June 7. Bids should be submitted in French to D.C.M.P., Bureau d' Achat, B.P. 1497, Kinshasa 1, Republic of Zaire, Africa. This tender is part of a program to supply the entire country of Zaire with pharmaceutical products. Traditional market has been in Europe but government is looking for new markets. Tender with specifications in French, covering all 19 items, available from Chemicals and Rubber Division, BDC-712, U.S. Department of Commerce, Washington, D.C. 20230, ★(202-967-3420). A review copy will also be available at the Department of Commerce Field Office, 11444 Federal Bldg., 450 Golden Gate Ave., San Francisco, Calif. 94102, ★(415-556-5868).

●**28300—ZAIRE**—14 surgical items, including cloth bandages, compresses, adhesive tape, etc. Tender No. 110/72, bid deadline June 14. Bids should be submitted in French to D.C.M.P., Bureau d'Achat, B.P. 1497, Kinshasa 1, Republic of Zaire, Africa. This tender is part of a program to supply the country of Zaire with pharmaceutical items. Traditional market has been Europe but the government is looking for new markets. Tender with specifications in French, available from Chemicals and Rubber Division, BDC-712, U.S. Department of Commerce, Washington, D.C., 20230, ★(202-967-3420). A review copy will also be available at the Department of Commerce Field Office, 11444 Federal Bldg., 450 Golden Gate Ave., San Francisco, Calif., 94102, ★(415-556-5868).

28349 — ISRAEL — Veterinary pharmaceuticals for chicken/cattle/pets' diseases such as CRD, coccidiocides, others; antibiotics for veterinary use. Isaac Federman Ltd. (importer, dist., wholesale, agent), 74-76 Petah-Tiqva Rd., Tel Aviv 67215. Cable address: FEDICO TELAVIV. Telex: 33419FEDCO ISRAEL. WTD in prep.

Gum, wood chemicals

28612 — BOLIVIA — Tanning materias, natural; oils used for tanning leather. Importadora y Exportadora "Sudamericana" (importer, dist.), Avenida Mariscal Santa Cruz 1280, P.O. Box 1550, La Paz. WTD 2/72.

Chemical products

●**28900—IRAN** — Cigarette filter adhesive; 70,000 kilos; PH about 7; for use on cigarette making machines with maximum output 2500 units per minute. Tender No. 3042, bid deadline June 18. Iranian Tobacco Company, Teheran. Specifications available on a short-term loan basis to firms domiciled in the U.S. from Chemicals and Rubber Division, BDC-712, U.S. Department of Commerce, Washington, D.C., 20230, ★(202-967-2960). A review copy will also be available at the Department of Commerce Field Office, 11444 Federal Bldg., 450 Golden Gate Ave., San Francisco, Calif., 94102, ★(415-556-5868).

●**28900—IRAN** — Cigarette filter adhesive; 70,000 kilos; PH about 7; for use on cigarette making machines with maximum output 2500 units per minute. Tender No. 3042, bid deadline June 18. Iranian Tobacco Co., Tehran. Specifications available on a short-term loan basis to firms domiciled in the U.S. from Chemicals and Rubber Division, BDC-712, U.S. Department of Commerce, Washington, D.C. 20230. ★(202-967-2960). A review copy will also be available at the Dept. of Commerce Field Office, 11444 Federal Bldg., 450 Golden Gate Ave., San Francisco, Calif. 94102. ★(415-556-5868).

●**28900—KOREA**—Polyvinyl alcohol for surface sizing paper, 20 metric tons, viscosity 25-30 centipoises; polyvinyl alcohol for paper adhesives, 20 metric tons, viscosity 4-6 centipoises. Tender No. KFX-72036-PIII, bid deadline May 30. Administrator, Office of Supply, Republic of Korea, Seoul. Contact Korean Consulate General in New York, Attn: Procurement Officer, 9 East 80 St., New York, N.Y., 10021, ★(212-879-8899). Specifications available on a short-term loan basis to firms domiciled in the U.S. from Chemicals and Rubber Division, BDC-712, U.S. Dept. of Commerce, Washington, D.C., 20230, ★(202-967-2960). A review copy will also be available at the Department of Commerce Field Office, 11444 Federal Bldg., 450 Golden Gate Ave., San Francisco, Calif., 94102, ★(415-556-5868).

28930—FRANCE—Special inks for packaging (water based). Direct purchase & agency. C.I.T.E.C. Compagnie Internationale de Technique et de Chimie (importer, agent), 16-18 rue Budé, 75–Paris 4. WTD 1/72.

28930—LIBYA—Printer's ink. Mr. S. Filfil (printer), 1719 'Omar ibn al-'Ass, Tripoli. WTD in prep.

28993—SWITZERLAND—Water resisting sealing compounds for building industry. Direct purchase & agency. Gétaz, Romang, Ecoffey S.A., Attn: Mr. Martinet (importer, dist., mfr.), rue des Terreaux 21, 1000 Lausanne. WTD 4/72.

Paving, roofing materials

29523—SWITZERLAND—Asphalt shingles for roofing. Direct purchase & agency. Gétaz, Romang, Ecoffey S.A., Attn: Mr. Martinet (importer, dist., mfr.), rue des Terreaux 21, 1000 Lausanne. WTD 4/72.

Plastic products

30790—SWITZERLAND—Plastic panels of all kinds for building industry. Direct purchase & agency. Gétaz, Romang, Ecoffey S.A, Attn: Mr. Martinet (importer, dist., mfr.), rue des Terreaux 21, 1000 Lausanne. WTD 4/72.

Footwear, except rubber

31417—SWITZERLAND—Ski boots, tennis shoes. Wollgarn Aktien Gesellschaft (importer, dist.), Hardturmstr. 127, 8037 Zurich. WTD 4/72.

Leather goods

31990—FRANCE—Saddlery, harnesses, whips and other accouterment for horsemanship. Direct purchase & agency. Ukal, S.A. (importer, dist.), 3-5 Rue des Franciscains, 67 Haguenau. WTD in prep.

Nonmetallic mineral products

32960 — SWITZERLAND — Glass and rockwool for insulating purposes. Direct purchase & agency. Gétaz, Romang, Ecoffey S.A., Attn: Mr. Martinet (importer, dist., mfr.), rue des Terreaux 21, 1000 Lausanne. WTD 4/72.

Steel mill products

●**33100—IRAN** — 19 different sizes of steel pipe type ST-60 totaling 50,540 kgs. Tender Notice No. 1576/50 from the Iranian State Railways. Bid deadline June 3. Copies of the above tender available from the Iron & Steel Program, BDC-786, U.S. Dept. of Commerce, Washington, D.C., ★(202-967-2613)

33123—IRAN—Hot coil steel for use in rolling sheets in gauges .5 millimeter to 8 millimeter for fabricating truck cabs. Khavar Co., Attn: Mr. Hossein Ali Soudavar (Sherkat Automobile Sazi Khavar) (importer, dist., mfr.), 529 Saadi Ave., Tehran. WTD in prep.

33124—CANADA—Special alloyed steel plate light weight and bullet proof for use in making twenty armored trucks of following dimensions: fourteen feet six inches in length, seven feet six inches in width, and about seven feet six inches in height. Correspondence requested in French. Mr. Maurice Babeau, Gen. Dir.,

Alliance Security & Investigation Ltd. (mfr.), 2609 Orleans St., Montreal 403, Quebec. WTD in prep.

33129 — ARGENTINA — Six thousand kilograms of one millimeter diameter number 316 L stainless steel, in coil form. Meitar Aparatos (mfr.), Aristóbulo del Valle 7090, Santa Fe, Pcia. de Santa Fé. WTD in prep.

33176—ITALY—Pipe, seamless steel, not made in rolling mills (stainless steel). Montedison S.p.A., Attn: Ing. Lombardo, Seruizio Coordinamento Ricerche (mfr.), Largo Donegani 1, Milan. WTD 3/72.

Primary smelting, refining of nonferrous metals

● **33300 — THAILAND** — Aluminum ingot, e c grade, unspecified quantity, bid deadline June 19, Asian Development Bank financed. Tender A-019 documents and specifications available for $25 from Foreign Purchasing Section, Electricity Generating Authority of Thailand, Nonthaburi.

Rolling, drawing, extruding of nonferrous metals

● **33500—INDIA**—Amendment to Tender No. IDA/UPSEB/14 for ACSR Conductor: Tender documents available from: Superintending Engineer, Electricity Substation Design Circle, 4 Vikramaditya Marg, Lucknow-1. U. P. India, and the cost $13.50 of the documents may be remitted in the form of Demand Draft drawn on any Indian Bank in favor of "The Executive Engineer, Electricity Transmission Construction Division, Lucknow." Bid deadline, June 15.

●**33500—SINGAPORE**—Chief Electrical Engineer, Public Utilities Board, City Hall, St. Andrew's Road, Singapore 6, invites tenders for supply of 3.8/6.6 kv. polyethylene insulated aerial power cables (100,000 meters) and accessories. Tender No. A.D.B. item No. 4. Bid deadline June 14. Tender deposit is S$1,000 (US$1 = S$2.80) refundable on receipt of a bona fide tender. Deposit may be made by crossed check to "Public Utilities Board, Singapore." Local agents may submit tender deposits for their manufacturers if authorized.

●**33500—COLOMBIA**—The Instituto Colombiano de Energia Electrica—ICEL (Colombian Institute of Electric Power), a Division of the Colombian Ministry of Public Works, has published Tender No. UPIB-B-3-No. 0022 in reference for the supply of **250,000 kilograms of copper finish conduits.** Specifications may be purchased from the Instituto Colombiano de Energia Electrica—ICEL, Carrera 13 No. 27-00, Oficina 310, Bogota, Colombia, for 1,000 Colombian pesos ($1 = 21.5 pesos), first copy, and 500 pesos each additional copy. These amounts will not be refunded. All bidders must submit a Seriousness Guarantee Bond equivalent to 400,000 pesos, valid for 120 days as of the closing date of the tender. Supply of the material in question must be effected 90 days after ICEL has established the corresponding Letter of Credit. Bids must be submitted to the Secretaria General del ICEL, Carrera 13, No. 27-00, Bogota, before 3 p.m., June 7.

●**33500 — THAILAND** — Purchases & Stores Dept., Metropolitan Electricity Authority, 121 Chakpet Rd., Bangkok 2, invites tenders for Service wire, type A, B, C and Control Cable. Tender number MEA-PSD-282. Bid deadline June 13.

●**33500—SPAIN**—Red Nacional de los Ferrocarriles Espanoles (RENFE), Direccion de Compras, Plaza de los Sagrados Corazones 7, Madrid (16), Spain, calls for bids for copper telephone wire with an approximate bid deadline of June, and for $3.2 million of copper wire for electrification with an approximate bid deadline of December.

Hand tools, general hardware

34231—JAPAN—Hand service tools for bending stainless steel tubes of ½"–1½" diameter for aircraft use. The Bunka Boeki Co., Ltd. (importer, dist., agent), Marunouchi-Yaesu Bldg., 6 Marunouchi 2-chome, Chiyoda-ku, Tokyo. WTD 12/71.

34250 — TAIWAN — Motor-driven hacksaws, metal-cutting band saws. Windmill Co., Ltd. (importer, agent, exporter), 68 Chien Kuo North Rd., Taipei 104. WTD 1/72.

34291—SWITZERLAND—Novelty automobile hardware, accessories. Paul Niederoest & Co., Attn.: E. Kruse (importer, dist., mfr.), CH-8716 Schmerikon. WTD 4/72.

Heating apparatus, plumbing fixtures

● **34320 — ZAMBIA** — Plumbing fixture fittings, trim (brass goods). Requests conditions of payment, catalogs, price lists, pamphlets, brochures. Direct purchase & agency. Zambital Ltd., Attn: Mr. N. Rosolen, Mgr. Dir. (importer, dist.), P.O. Box 2465, Kitwe. WTD in prep.

Fabricated structural metal products

34411 — LIBYA — Structural steel for hangar type building; estimated size of initial purchase 16 large structures. Direct purchase & agency. Correspondence requested in English and Arabic. M & A Burawi Zit (dist., agent, retailer), P.O. Box 968, Benghazi. WTD in prep.

34492—BRAZIL—Prefabricated steel or aluminum industrial and commercial buildings up to four floors. Requests offers only from firms on East Coast or Gulf of Mexico. Moto-Importadora Ltda. (importer), Caixa Postal 94, 69000 Manaus, State of Amazonas. WTD 4/72.

Fabricated wire products

34819—ITALY — Cages for laboratory animals. Galeazzi Paolo, S.p.A. (importer, dist., agent), Via Macedonia 10, 00179 Rome. WTD 4/72.

Fabricated metal products

34941—ZAMBIA—Metal valves for piping systems. Direct purchase & agency. Requests conditions of payment, catalogs, price lists, pamphlets, brochures. Direct purchase & agency. Zambital Ltd., Attn: Mr. N. Rosolen, Mgr. Dir. (importer, dist.), P.O. Box 2465, Kitwe. WTD in prep.

34942 — ZAMBIA — Metal fittings and unions for piping systems. Requests conditions of payment, catalogs, price lists, pamphlets, brochures. Direct purchase & agency. Zambital Ltd., Attn: Mr. N. Rosolen, Mgr. Dir. (importer, dist.), P.O. Box 2465, Kitwe. WTD in prep.

34943—ZAMBIA—Plumbing and heating valves and specialties. Requests conditions of payment, catalogs, price lists, pamphlets and brochures. Direct purchase & agency. Zambital Ltd., Attn: Mr. N. Rosolen, Mgr. Dir. (importer, dist.), P.O. Box 2465, Kitwe. WTD in prep.

34944—ITALY—Strainers, line; for use in piping systems. SNIA Viscosa S.p.A. (mfr.), Cesano Maderno (Milan). WTD 2/71.

34944—ZAMBIA—Metal valves, fittings for use with heavy mining equipment. Requests conditions of payment, catalogs, price lists, pamphlets, brochures. Direct purchase & agency. Zambital Ltd., Attn: Mr. N. Rosolen, Mgr. Dir. (importer, dist.), P.O. Box 2465, Kitwe. WTD in prep.

34944 — ITALY — Rapid action metal valves, fittings (except plumbers') for experimental plants, pilot plants. Breda Termomeccanica, Attn: Ing. De Santis, Istituto di Ricerche (mfr., research labs for iron, steel industries), Viale Sarca 336, Sesto S. Giovanni (Milano). WTD 10/70.

34980—ITALY—Piping systems for pulp, paper, chemical industries. Montedison S.p.A., Attn: Ing. Lombardo, Seruizio Coordinamento Ricerche (mfr.), Largo Donegani 1, Milan. WTD 3/72.

34990—JAMAICA—Metal novelty items; broad range of small decorative, utility type items. Brochures, price lists requested. Elias Ziadie, Attn: Winston Ziadie (importer, dist., retailer), 71 Luke Lane, Kingston. WTD 4/72.

Farm machinery

35221—LIBYA — Agricultural tractors. Yusef Saadi Corp. (importer, retailer), Shara Tarek #1, P.O. Box 494, Tripoli. WTD in prep.

35228—FRANCE—Instruments and tools for livestock breeders such as marking, feeding, grooming and sanitary care devices; cutlery items for animal care such as hoof shears and cutters, hair clippers, castration instruments. Direct purchase & agency. Ukal, S.A. (importer, dist.), 3-5 Rue des Franciscains, 67 Haguenau. WTD in prep.

Construction, mining, equipment

●**35300—INDIA**—Supply and installation of dredging sandpump, capacity 350 tons per hour, or alternatively two pumps of 175 tons per hour. Bid deadline June 6, Tender D.MAN I/479/72. Contact the Executive Engineer, Marine, State Port Dept., P.B. No. 11, Kakinada Andhra Pradesh.

35310—LIBYA — Industrial trucks and tractors, cement mixing equipment, winches, airport and road construction equipment, steel for bridges & culverts, sewage and road maintenance equipment. Correspondence requested in English & Arabic. National Civil Works Co. (importer), P.O. Box 1299, Benghazi. WTD in prep.

35321—ZAMBIA—Underground mining machinery, equipment. Requests conditions of payment, catalogs, price lists, pamphlets, brochures. Direct purchase & agency. Zambital Ltd., Attn: Mr. N. Rosolen, Mgr. Dir. (importer, dist.), P.O. Box 2465, Kitwe. WTD in prep.

35322—ZAMBIA—Crushing, pulverizing, screening plants, stationary. Requests conditions of payment, catalogs, price lists, pamphlets, brochures. Direct purchase & agency. Zambital Ltd., Attn: Mr. N. Rosolen, Mgr. Dir. (importer, dist.), P.O. Box 2465, Kitwe. WTD in prep.

35323—ZAMBIA—Other mining machinery, equipment. Requests conditions of payment, catalogs, price lists, pamphlets, brochures. Direct purchase & agency. Zambital Ltd., Attn: Mr. N. Rosolen, Mgr. Dir. (importer, dist.), P.O. Box 2465, Kitwe. WTD in prep.

35324—ZAMBIA—Parts, attachments for mining machinery and equipment. Requests conditions of payment, catalogs, price lists, pamphlets, brochures. Direct purchase & agency. Zambital Ltd., Attn: Mr. N. Rosolen, Mgr. Dir. (importer, dist.), P.O. Box 2465, Kitwe. WTD in prep.

Metalworking machinery

35418—ITALY—Machine tools, metal cutting types, plasma process metal cutting machines for laboratory research, industrial production. Breda Termomeccanica, Attn: Ing. De Santis, Istituto di Ricerche (mfr., research labs for iron, steel industries), Viale Sarca 336, Sesto S. Giovanni (Milano). WTD 10/70.

35421 — SWITZERLAND — Steel band bending, forming machines. Paul Niederoest & Co., Attn: E. Kruse (importer, dist., mfr.), CH-8716 Schmerikon. WTD 4/72.

35421—ZAMBIA—Small portable scrap metal crushing press which can be used to press small tin metal into scrap bundles for use in metal scrap yards. Press should be able to fit in back of 7-ton or 10-ton truck. Mufulira Scrap Metals, Attn: Mr. Deryck Mungwala (mfr.), P.O. Box 1520, Lusaka. WTD in prep.

35422—ITALY—Medium-small extrusion presses for laboratory, pilot plant use. Breda Termomeccanica, Attn: Ing. De Santis, Istituto di Ricerche (mfr., research labs for iron, steel industries), Viale Sarca 336, Sesto S. Giovanni (Milano). WTD 10/70.

35422—SURINAM — Aluminum extrusion press to produce door and window frames, studs, other building extrusions. Surinaamse Aluminium Fabriek Everhard (importer, mfr., retailer), Zwartenhovenbrugstraat 15, P.O. Box 979, Paramaribo. WTD 4/72.

35422 — SWITZERLAND — Steel band fabricating presses, related parts. Paul Niederoest & Co., Attn.: E. Kruse (importer, dist., mfr.), CH-8716 Schmerikon. WTD 4/72.

35423—IRAN—Machinery for conversion of hot coil steel to sheet steel to gauges .5-8 millimeter for production of 3-4,000 tons annually. Khavar Co., Attn: Mr. Hossein Ali Soudavar, Sherkat Automobile Sazi Khavar (importer, dist., mfr.), 529 Saadi Ave., Tehran. WTD in prep.

35442 — ARGENTINA — Ceramic and aluminum molds for manufacture of plasti cgloves for domestic, industrial use. Production of vinyl or PVC gloves on plain hand molds by dipping process. Plastilit S.A.I.C.F.I.A. (mfr.), Avda. Facundo Zuviría 6652, Santa Fé, Pcia. de Santa Fé. WTD in prep.

35452—TAIWAN—Precision measuring tools including micrometer calipers, straight edges, gages, etc. Windmill Co., Ltd. (importer, agent, exporter), 68 Chien Kuo North Rd., Taipei 104. WTD 1/72.

35453—TAIWAN—Toolroom specialties including steel tape rules, levels, squares, vises, etc. Windmill Co., Ltd. (importer, agent, exporter), 68 Chien Kuo North Rd., Taipei 104. WTD 1/72.

Special Action

Each of the following trade notices is deemed to rate the special attention of American manufacturers and suppliers by the U.S. Commercial Officers overseas.

26210—NORWAY — Printing paper. Johan Basberg & Co. A/S, Attn: Mr. Ingar Eriksen (importer, agent), Raadhusgaten 10, Oslo 1. WTD in prep.

26310—NORWAY — Clay coated board, except building board. Johan Basberg & Co. A/S, Attn: Mr. Ingar Eriksen (importer, agent), Raadhusgaten 10, Oslo 1. WTD in prep.

26410—NORWAY — Labels, gummed, unprinted; coated paper; specialties. Johan Basberg & Co. A/S, Attn: Mr. Ingar Eriksen (importer, agent), Raadhusgaten 10, Oslo 1. WTD in prep.

35531—LEBANON—Versatile machinery for making furniture for both short (approx. 200 pieces) and longer runs. Also interested in furniture fabrics, foam rubber, formica. Requests catalogs, price lists. Triad-Condas Intl. SAL, Attn: R. L. Drummond (mfg.), Abbel Rehman Bldg., Hamar St., P.O. Box 4984, Beirut. WTD 7/71. See also listing under Licensing, Investment Abroad section.

35791 — SWITZERLAND — Advanced business systems, such as addressing machinery, except metal plate, printers and embossers for plastic cards, hot sealing presses for plastic cards, collators, sheet assembly systems, letter openers, labelling systems, label gluers, office laminators, letter and sheet folding and envelope stuffing systems, any other genuine novelty office appliance or device. SADRAG, Attn: Mr. A. Jacob, Mng. Dir. (dist., mfr.), 4633 Laeufelfingen. WTD 4/72.

Rd., Taipei 104. WTD 1/72.

35482 — LIBYA — Power-driven hand tools. Direct purchase or agency. Hobby Center (F.M. ockasha) (importer, dist., retailer), Tunis St. #15, P.O. Box 2513, Tripoli. WTD in prep.

35483 — NETHERLANDS — Gas type welding apparatus, including machines. Representations requested for Netherlands, West Germany, Great Britain. Interlas N.V. (importer, dist., agent), 15 Amersfoortsestraat, Soesterberg. WTD 4/72.

35484 — SWITZERLAND — Advanced automotive maintenance equipment, diagnostic instruments, service station tools, bodyshop machinery. Paul Niederoest & Co., Attn.: E. Kruse (importer, dist., mfr.), CH/8716 Schmerikon. WTD 4/72.

35485—SWITZERLAND—Wire bending, cutting, spring making machines, related parts, accessories. Paul Niederoest & Co., Attn: E. Kruse (importer, dist., mfr.), CH-8716 Schmerikon. WTD 4/72.

Special industry machinery

●**35500—ARGENTINA**—Grain Elevator Equipment. The National Bureau of Grain Elevators invites bids for the supply and installation of the electrical and mechanical equipment for the new 80-thousand ton grain elevator at the Port of Rosario, Province of Santa Fe. The official budget for this project is 27 million Arg. pesos. Deadline for submission of bids is June 12. Conditions available for 500 Arg. pesos from Direccion Nacional de Construccion de Elevadores de Granose, Avda. 9 de Julio 1925, piso 4°, Buenos Aires, Argentina, by asking for Public Tender No 371/72. $1 = 9.70 Argentine pesos.

35513—KENYA—Machinery for making molasses powder. Requests detailed formulas, other necessary information concerning difference between liquid and powder molasses. Farmers' General Stores Ltd. (importers, commission agents), P.O. Box 144, Nakuru. WTD in prep.

35513—KENYA—Machinery for processing macadamia nuts. Kenya Orchards Ltd. (importer), Mutituni & Mua Hills, Machakos, Eastern Province. WTD 2/72.

35513—YUGOSLAVIA — Machinery for bottling mineral water. Requests technical specifications, prices for modernization, expansion. Marijan Badel (mfr.), Mr. Pilko, Vlaska 116, Zagreb. WTD in prep.

35521 — FRANCE — Textile finishing, bleaching machinery. Direct purchase & agency. Serteco S.A.R.L. (agent), B.P. 22, 59–Bondues. WTD in prep.

35532—LIBYA—Wood working home tools. Direct purchase or agency. Hobby Center (F.M. Ockasha) (importer, dist., retailer), Tunis St. #15, P.O. Box 2513, Tripoli. WTD in prep.

35540—ITALY—Small and experimental Fourdrinier machines; equipment and controls for fabrication of coated papers, equipment for color coating; laboratory analyzers for paper products. Cartiere Burgo S.p.A., Divisione Impianti Sperimentali e Pilota, Attn: Mr. Gorini (mfr.), 38 Corso Monforte, Milan. WTD in prep.

35592—INDIA—Equipment to manufacture aluminum collapsible tubes having .30 and .1 wall thickness and rigid containers having outside diameter .4 and thickness .4 and .5; capacity of equipment approximately 75 strokes per min. High speed equipment with 125 to 150 strokes per min., if available, preferred. Sudarshan Chokhani Industrial Co., Attn: Shriram C. Chokhani (dist., exporter), 138 Kalbadevi Rd., Bombay 2. WTD 6/71.

Greece To Award Turn-Key Contract For Sugar Plant

The Hellenic Sugar Industry, S.A., 34 Franklin Roosevelt St., Thessaloniki, has announced a call for bids for the engineering, supply of equipment, construction and initial operation of a beet sugar plant, to be furnished on a turn-key basis. The plant would be constructed near Orestias, Thrace, in northern Greece; it should have a processing capacity of 3,000 metric tons of beets per 24 hours, and be commissioned for the 1975 beet harvest, but not later than Sept. 1, 1975. Bid deadline is July 3. Conditions and specifications documents may be obtained directly from the issuing agency at 1,000 drachmas (US$34) per set (which includes both conditions and specifications). One set of these documents may be examined in Room 2116, U.S. Dept. of Commerce, Washington, D.C.

35593 — ITALY — Plastic extruders (small). Snia Viscosa S.p.A., Attn: Dr. Vincerzo Ruoti, Centro Ricerche Materie Plastiche (mfr.), Cesano Maderno (Milan). WTD 2/71.

35593—ZAMBIA—Equipment for polyurethane processing plant including polyurethane ridged processing. Pan Africa Construction Ltd., Attn: J. C. Francisco, Mgn. Dir. (mfr., contractor), P.O. Box 2197, Lusaka. WTD in prep.

35594 — ITALY — Small extruding machines, molds, vulcanizing presses. Industrie Pirelli S.p.A., Attn: Ing. Alfonso Coronelli, Direzione Impianti Industriali (mfr.), Piazza Duca d'Aosta 3, Milan. WTD 3/71.

35594 — PHILIPPINES — Used battery rubber container and cover making machine. Ramcar Inc. (mfr.), P.O. Box 291, Manila. WTD in prep.

35595—LIBYA—Construction of and machinery, accessories for modern fully automatic barrel factory; capacity not less than 200,000 barrels per yr. Early delivery requested. Salem Omar El-Maghrabi Co. (mfr.), Suk Atthalat, Tripoli. WTD in prep.

General industrial machinery

35610—LIBYA—Pumps for agricultural purposes. Yusef Saadi Corp. (importer, retailer), Shara Tarek #1, P.O. Box 494, Tripoli. WTD in prep.

35611—TAIWAN—Automotive circulating pumps. Shin Yung Trading Co., Ltd. (importer, agent, exporter), 87 Chang An West Rd., Taipei 102. WTD in prep.

35615—ITALY—Small centrifugal pumps without sealing for laboratory, industrial use. Breda Termomeccanica, Attn: Ing. De Santis, Istituto di Ricerche (mfr., research labs for iron, steel industries), Viale Sarca 336, Sesto S. Giovanni (Milano). WTD 10/70.

35615—ITALY—Industrial pumps—low capacity (5 to 200 cm/h) centrifugal pumps for extrusion of high viscosity liquids from vacuum containers. Montedison S.p.A. (mfr.), Largo Donegani 1, Milan. WTD 3/72.

35690—AUSTRALIA—Sharpening machinery for bread slicer blades (automatic). Bread Slicer Blade Service (blade sharpening service), 112 Thistle St., Gordon Park, Q. 4031. WTD in prep.

Office, computing, accounting machines

35731—ITALY—Recorders, tape; for data computers. Montedison S.p.A. (mfr.), Largo Donegani 1, Milan. WTD 3/72.

35760—ITALY—Automatic bulk material weighers, predetermined weight type, for weighing, filling, batching and proportioning; low capacity (5 to 200 cc/h) proportioning apparatus for liquids of low viscosity at pressures from one atmosphere to high vacuums. Industrie Pirelli S.p.A., Attn: Ing. Alfonso Coronelli, Direzione Impianti Industriali (mfr.), Piazza Duca d'Aosta 3, Milan. WTD 3/71.

35760—ITALY—Weighing machines and apparatus, automatic, high precision. Montedison S.p.A., Attn: Ing. Lombardo, Servizio Coordinamento Ricerche (mfr.), Largo Donegani 1, Milan. WTD 3/72.

Service industry machines

35820—GERMANY—Equipment for drycleaning plants (excluding dry cleaning units), equipment for garment manufacturers, presses etc., preferably newly developed equipment. Direct purchase & agency. Dipl. Ing. Hans Schneider (importer, dist., agent), 35 Lerchesbergring, 6000 Frankfurt/Main. WTD 4/72.

35820 — ITALY — Commercial washing machines to wash cages for laboratory animals. Galeazzi Paolo, S.p.A. (importer, dist., agent), Via Macedonia 10, 00179 Rome. WTD 4/72.

35853—ISRAEL—Cooling devices, solid-state, for use in small picnic-type coolers designed to operate off automobile electrical system, 12-Volt; or in complete picnic-type coolers. Atmor Airconditioning Ltd. (importer, mfg., agent), 16 Harav Frishman Maymon St., Tel Aviv. WTD 9/71.

35853—ISRAEL—Refrigeration units for mobile, static deep-freeze containers. Sharit Marketing Co. (importer, dist. wholesale, mfr.), Maya House, 74 Petah-Tiqva Rd., Tel Aviv, 67215. WTD 1/72.

35853—SPAIN—Commercial refrigeration equipment, all classes. Correspondence requested in Spanish. S.A.D.F.E. (importer, dist.), Apartado Postal núm. 394, Valladolid. WTD 4/72.

35891 — SPAIN — Commercial cooking, food warming equipment. Correspondence requested in Spanish. S.A.D.F.E. (importer, dist.), Apartado Postal núm. 394, Valladolid. WTD 4/72.

Machinery

35990—CANADA—Hydraulic cylinders -all sizes; pneumatic controls. Hydraulic Service & Equipment Co. Ltd., Attn: A. H. Fraser, Gen. Mgr. (importer, dist., mfr.), 102 E. 2nd Ave., Vancouver 10, B. C. WTD 4/72.

Electric transmission, distribution

● 36100—INDIA—Supply of protective relays with panels for 132 kv and 220 kv lines. Tender No. IDA/UPSEB/XX15, bid deadline June 21. Superintending Engineer, Electricity Substation Design Circle, U.P. State Electricity Board, 10-B. Madan Mohan Malaviga Road, Lucknow-1 U.P. A copy of specifications is available for review only, not for loan, from the Power and Electrical Equipment Program, Room 2806, BDC, U.S. Department of Commerce, Washington, D.C., 20230, ★(202-967-3526).

● 36100—MALAYSIA—Supply of indoor type, extensible, 11 kv circuit breaker and oil switch equipment rated 250 MVA. Tender No. 10475, bid deadline June 16. Office of the Purchasing & Contracts Officer, National Electricity Board of the States of Malaya, P.O. Box 1003, No. 129 Jalon Bangsar, Kuala Lumpur. Tender documents are available upon payment $17.73, non-refundable, either check or bank draft made out to the Chief Accountant at the above address. A copy is also available, for review only, not for loan, at the Power and Electrical Equipment Program, Room 2806, BDC, U.S. Department of Commerce, Washington, D.C., 20230, ★(202-967-3526).

● 36100—TUNISIA—Supply of two 25 MVA, three 30 MVA and one 40 MVA transformers; electrical equipment for five transformer stations; construction of two power lines 150 kv and 225 kv of 62 miles each; three 90 kv and six 150 disconnectors; conductors for above lines. Tender Nos. not available, bid deadline June 30. Societe Tunisienne de L'Electricite Et Du Gaz (STEG), 38, Rue Kemal Ataturk, Tunis Tender documents available at STEG for $2 each. Equipment purchases to be financed by IBRD loan.

36112 — TAIWAN — Electric frequency meters. Windmill Co., Ltd. (importer, agent, exporter), 68 Chien Kuo North Rd., Taipei 104. WTD 1/72.

Electrical industrial apparatus

36214—ITALY—Prime mover generator set, except steam or hydraulic turbine—portable high temperature induction generators and portable AC and DC power supplies for laboratory, industrial use. Breda Termomeccanica, Attn: Ing. De Santis, Istituto di Ricerche (mfr., research labs for iron, steel industries), Viale Sarca 336, Sesto S. Giovanni (Milano). WTD 10/70.

36220—ITALY—Controls and control accessories, industrial; electric, electronic. Montedison S.p.A., Attn: Ing. Lombardo, Servizio Coordinamento Ricerche (mfr.), Largo Donegani 1, Milan. WTD 3/72.

36220—ITALY—Controls, control accessories for material testing in rubber industry. Industrie Pirelli S.p.A., Ing. Alfonso Coronelli, Direzione Impianti Industriali (mfr.), Piazza Duca d'Aosta 3, Milan. WTD 3/71.

36231 — NETHERLANDS — Welding equipment for electric, argonarc, plasma-arc, related types of welding. Representations requested for Netherlands, West Germany, Great Britain. Interlas N.V. (importer, dist., agent), 15 Amersfoortsestraat, Soesterberg. WTD 4/72.

Electrical lighting, wiring equipment

36420—ZAMBIA—Cool white high output fluorescent lamps; white high output fluorescent lamps; single pin slim line fluorescent lamps; rapid start series lamp ballast for 2 white or cool white high output fluorescent lamps. Minimum starting temperature 20° F 220/230 volts 50 cycles. Rapid start series lamp ballast for one white high output fluorescent lamp. Instant start ballast for 2 single pin slim line fluorescent lamps; voltage 220/230, 50 cycles. Instant start ballast for one single pin slim line fluorescent lamp. Requests prices, landed cost in Lusaka. Electrical Maintenance Lusaka, Ltd., Attn: Ivan Osella (importer, dist., retailer), P.O. Box 1189, Lusaka. WTD in prep.

Radio, television receiving sets

36511—SPAIN—Portable two-way FM radio receivers, for bands 25-40, 32-50, 66-88, 131-174 Mh. Kenmeca, S.A. (importer, dist.), Dracena, 42, Madrid (16). WTD 3/72.

Communications equipment

36623—JAMAICA—Electrically operated alarm system with built-in standby power service; key activated type; 50 cycle, 110/220 voltage. Quotations c.i.f. Kingston. Brochures requested. Montrose Printery Ltd., Attn: S. R. McDonald, Mng. Dir. (importer, mfr.) 10 Arnold Rd., P.O. Box 29, Kingston 4. WTD 4/72.

Electrical machinery, equipment

36930—GERMANY—Electrical and electronic diagnostic equipment. Direct purchase & agency. Peter Kalger GmbH. (importer, dist., agent), 23 Oberissigheimer Str., 6451 Neuberg b. Hanau. WTD 4/72.

Motor vehicles, equipment

37130—JAMAICA—Two mobile medical

care units, complete with electrical power plant, laboratory X-ray unit, operating table. Quotations c.i.f. Kingston. Brochures requested. Kingston Industrial Agencies Ltd., Attn: Sammy Hendriques (importer, dist., agent), 381 Spanish Town Rd., Kingston 11. WTD 10/71.

37141 — AFGHANISTAN — Automotive parts, accessories. Tijarat Khana Taj Mohammed & Sons (importer, dist., agent), Afghan Market, Kabul. WTD 4/72.

37141—SPAIN—Parts for motor vehicles, especially differentials, gear boxes. Recambios Angel (importer, dist., retailer), Vallehermoso, 11, Madrid (15). WTD 3/72.

Aircraft, parts

37212—SPAIN—Aircraft, utility, for aerial photography. Aerofoto, S.A. (importer, dist.), Comandante Zorita, 8, Madrid (20). WTD 3/72.

Motorcycles, bicycles, parts

37510—NORWAY—Motorcycle accessories. Moped-Spesialisten A/S Pe-Ko (importer, agent), Fred. Olsensgate 3, Oslo 1. WTD 4/72.

Engineering, laboratory, scientific, research instruments

38111—ITALY—Testing and measuring instruments for inspecting animals in scientific laboratories; portable autoclaves; formaldehyde disinfecting cabinets from 2 to 3 cubic meters in size. Galeazzi Paolo, S.p.A. (importer, dist., agent), Via Macedonia 10, 00179 Rome. WTD 4/72.

38112—ITALY—Autoclaves, laboratory. Snia Viscosa S.p.A., Attn: Dr. Vincenzo Ruoti, Centro Ricerche Materie Plastiche (mfr.), Cesano Maderno (Milan). WTD 2/71.

38112—ITALY—Distilling apparatus for multicomponent separations; laboratory furnaces. Montedison S.p.A., Attn: Ing. Lombardo, Servizio Coordinamento Ricerche (mfr.), Largo Donegani 1, Milan. WTD 3/72.

38112—ITALY—Experimental furnaces for pilot plants for special steels, alloys. Breda Termomeccanica, Attn: Ing. De Santis, Istituto di Ricerche (mfr., research labs for iron, steel industries), Viale Sarca 336, Sesto S. Giovanni (Milano). WTD 10/70.

38113—SPAIN—Photogrammetric equipment. Aerofoto, S.A. (importer, dist.), Comandante Zorita, 8, Madrid (20). WTD 3/72.

Instruments for measuring, indicating, controlling, physical characteristics

38311—SPAIN—Photomicrographic apparatus. Aerofoto, S.A. (importer, dist.), Comandante Zorita, 8, Madrid (20). WTD 3/72.

38213—ITALY—Industrial process instrumentation—high precision and high temperature instruments, recorders. Breda Termomeccanica, Attn: Ing. De Santis, Istituto di Ricerche (mfr., research labs for iron, steel industries), Viale Sarca 336, Sesto S. Giovanni (Milan). WTD 10/70.

38213—ITALY—Process instrumentation for experimental shop equipment, pilot plants. Industrie Pirelli S.p.A., Attn: Ing. Alfonso Coronelli, Direzione Impianti Industriali (mfr.), Piazza Duca d'Aosta 3, Milan. WTD 3/71.

38216—ARGENTINA—Measuring, control instruments which measure and control liquid flows on basis of varying concentration of liquid being moved. Instruments to be used primarily in production of juices for human consumption. Meitar Aparatos (mfr.), Aristóbulo del Valle 7090, Santa Fé, Pcia de Santa Fe. WTD in prep.

38220—ITALY—Automatic temperature controls—thermocouples and thermoresistances for high and ultra high temperatures. Breda Termomeccanica, Attn: Ing. De Santis, Istituto di Ricerche (mfr., research labs for iron, steel industries), Viale Sarca 336, Sesto S. Giovanni (Milan). WTD 10/70.

Optical instruments, lenses

38311—GERMANY—Automatic electrophoresis equipment, automatic densitometers, digital photometers, all for medical laboratories. Direct purchase & agency. Peter Kalger GmbH. (importer, dist., agent), 23 Oberissigheimer Str., 6451 Neuberg b. Hanau. WTD 4/72.

Surgical, medical, dental instruments

38410—FRANCE—Surgical, medical instruments, apparatus for sale in African, Middle-Eastern countries. Direct purchase & agency. Continental Import-Export, Tecnorex (importer, agent), 7bis, rue de Téhéran, 75–Paris 8. WTD in prep.

38421—FRANCE—Surgical appliances, supplies for sale in African, Middle-Eastern countries. Direct purchase & agency. Continental Import-Export, Tecnorex (importer, agent), 7bis, rue de Téhéran, 75–Paris 8. WTD in prep.

Photographic equipment, supplies

38611—SPAIN—Cameras, still; especially designed for aerial photography. Aerofoto, S.A. (importer, dist.), Comandante Zorita, 8, Madrid (20). WTD 3/72.

38612—ITALY—Wide range of modern electrostatic photocopying machines (latest techniques). Tecnopaper Copies (importer, dist., retailer), 2 Traversa G. Petroni, n.12 i–l. WTD 4/72.

38615—SPAIN—Photographic sensitizing film, plates. Aerofoto, S.A. (importer, dist.), Comandante Zorita, 8, Madrid (20). WTD 3/72.

38617—ITALY—Electrostatic paper for photocopy. Tecnopaper Copier (importer, dist., retailer), 2 Traversa G. Petroni n. 12 i–l, 70100 Bari. WTD 4/72.

38618—SPAIN—Photographic chemicals, prepared. Aerofoto, S.A. (importer, dist.), Comandante Zorita, 8, Madrid (20). WTD 3/72.

Toys, amusement, sporting goods

39491 — LIBYA — Fishing equipment. Hobby Shop (F.M. Ockasha) (importer, dist., agent), Tunis St. #15, P.O. Box 2513, Tripoli. WTD in prep.

39493 — SWITZERLAND — Snow skis, safety ski bindings, novelty skiing equipment, water skis, tennis balls, rackets, mountain climbers' equipment. Wollgarn Aktien Gesellschaft (importer, dist.), Hardturmstr. 127, 8037 Zurich. WTD 4/72.

Pens, pencils, office, artists' items

39510—SWITZERLAND—Novel or attractive ball point pens, pencils, similar items. Direct purchase & agency. Carfa AG, Attn: Mr. H. Gfeller, Production Mgr. (importer, dist.), 8805 Richterswil. WTD in prep.

39520 — SWITZERLAND — Novel lead pencils, drafting instruments, materials. Direct purchase & agency. Carfa AG, Attn: Mr. H. Gfeller, Production Mgr. (importer, dist.), 8805 Richterswil. WTD in prep.

Novelties, buttons, notions

39630—ZAMBIA—All types of suit buttons. Piper Clothing Ltd., Attn: Mr. Gabriel Radson, Mng. Dir. (importer, mfr.), P.O. Box 1906, Ndola. WTD in prep.

39641—ZAMBIA—Zippers, slide fasteners. Piper Clothing Ltd., Attn: Mr. Gabriel Radson, Mgr. Dir. (importer, mfg.), P.O. Box 1906, Ndola. WTD in prep.

Manufacturing industries

39930—NORWAY—Magnetic sheets for production of advertising signs for placing on sides of automobiles, commercial vans. Bergen Reklameatelier, Attn: Mr. Kai O. Carlsen (dist., mfr.), Kong Oscarsgaten 43, 5000 Bergen. WTD 4/72.

39999—ZAMBIA—Afro wigs or any other suitable for Africans. Ernest M. Tchakanga, Import & Export Agent (importer, agent), P.O. Box 728, Mufulira. WTD in prep.

Wholesalers

50930 — KOREA — X-ray film scrap (used), 5,000 kg. Requests quotations, delivery terms asap. Sung Pung Enterprises Co. (dist., agent), I.P.O. Box 2089, Seoul. WTD 6/71.

Business services

73940—LIBYA—Rental of ship to transport bananas. ElFerjani Smeyda (importer, dist., retailer), 41 Suk al Talata, Vegetable Div., Tripoli. WTD in prep.

73940—LIBYA—To hire a ship to transport bananas from Ecuador to Tripoli. Ben Yones (importer, dist., agent), Suk Thalt, P.O. Box 2826, Tripoli. WTD in prep.

Motion picture production, distribution

78150 — SWEDEN — Film strips, slide films for educational purposes, especially for physics, science. Gumperts Skolmateriel AB (importer, mfr., exporter), Box 3038, S-400 10 Göteborg 3. WTD 4/72.

Lebanon Announces Tenders On VHF Radio Network

The Lebanese Army has issued a tender for the supply of a VHF radio network for internal security forces. Bid deadline June 20.

Bid should offer 200 mobile and fixed VHF radio units. The Government of Lebanon has budgeted 3.5 million Lebanese pounds for this project. Copies of tender announcement and specifications are available on a short-term loan basis to firms located in the U.S. from the Communications-Electronics Division, BDC-720, Room 1112 U.S. Department of Commerce, Washington, D.C., 20230, ★202-967-4822.

Agencies

Specific foreign firms have expressed interest in agency agreements for the products listed below. Exclusive agencies for these products are wanted only if specified.

Tanks, components

19310—THAILAND—Armored vehicles. Requests c.i.f. Bangkok prices, catalogs, brochures. Athon Sawai & Sons Ltd. (importer, dist.), 1293/4–9 Paholyothin Rd., Bangkok. WTD 2/72.

Small arms

19510—THAILAND—Machine guns including rounds; grenade launchers. Requests c.i.f. Bangkok prices, catalogs, brochures. Athon Sawai & Sons Ltd. (importer, dist.), 1293/4–9 Paholyothin Rd., Bangkok. WTD 2/72.

Small arms ammunition

19610 — ISRAEL — Shotgun shells, cartridges including small firearms for hunting, target shooting. Dixie Bullet Works (importer, mfr., agent), 102 Haifa Rd., Tel Aviv. WTD in prep.

Meat products

20118—JAMAICA—Canned Meats. Samples, brochures, price list c.i.f. requested. Levy Brothers Ltd., Attn: Vernon da Silva (importer, dist., agent), 44 Port Royal St., Kingston. WTD 7/71.

Canning, preserving foods

20310—JAMAICA — Canned fish, other seafood. Samples, brochures, price list c.i.f. requested. Levy Brothers Ltd., Attn: Vernon da Silva (importer, dist., agent), 44 Port Royal St., Kingston. WTD 7/71.

Food preparations

20999—JAMAICA — Spices. Brochures, samples, price list c.i.f. requested. Levy Brothers Ltd., Attn: Vernon da Silva (importer, dist., agent), 44 Port Royal St., Kingston. WTD 7/71.

Dyeing, finishing textiles, except wool fabrics, knit goods

22617—NEW ZEALAND—Finished cotton broad-woven fabrics, dyed and printed for clothing, furnishings. Fraser Napier & Co. Ltd., Attn: Mr. Alexis Harris (importer, dist., agent), P.O. Box 2697, Wellington. WTD in prep.

Textile goods

22970—SWITZERLAND— Preprocessed cotton, wool. Mr. Peter Rohland (importer, dist.), Kettenackerweg 22, 4125 Riehen. WTD in prep.

22992—NEW ZEALAND—Linen, natural-synthetic blends; dyed and printed; for clothing, furnishings. Fraser Napier & Co. Ltd., Attn: Mr. Alexis Harris (importer, dist., agent), P.O. Box 2697, Wellington. WTD in prep.

Men's, boys' furnishings

23212 — FRANCE — Sports shirts. Ste d'Exploitation et de Construction d'Ensembles Sportifs (dist.), 5, rue Jean Pigeon, 94–Charenton. WTD in prep.

Fabricated textile products

23940—THAILAND—Canvas tents for military purposes. Requests c.i.f. Bangkok prices, catalogs, brochures. Athon Sawai & Sons Ltd. (importer, dist.), 1293/4–9 Paholyothin Rd., Bangkok. WTD 2/72.

Paper mills

26216—JAMAICA—Writing and related papers in bulk: bond paper, onion skin. T. Geddes Grant (Dist.) Ltd., Attn: J. P. de St. Christo (importer, dist., agent), 109 Marcus Garvey Dr., Kingston 11. WTD 4/72.

Converted paper, paperboard items

26414—THAILAND — Autoclave tapes. Requests c.i.f. Bangkok prices, literature, samples. P.S.T. Enterprise Ltd., Partnership (importer, dist., agent), 133/9 Rajprarop Rd., Makasan, Bangkok. WTD 10/71.

26491 — NEW ZEALAND — Stationery. Gillette (New Zealand) Ltd., Attn: P. Birch, Mng. Dir. (importer, dist., mfr.), P.O. Box 30369, Lower Hutt. WTD 4/72.

Industrial chemicals

28122 — BOLIVIA — 100,000 kls solid caustic soda 99%. Rivek–Ricardo Velasco Krüger (importer, dist., agent), Calle Loayza 371, P.O. Box 5797, La Paz. WTD 1/72.

28185—SPAIN—Reagents grade organic chemicals. Instituto de Dermatología Cosmética A.L.E.J.O. (mfr.), Avda. Menéndez Pelayo, 13, Madrid (9). WTD 4/72.

Synthetic materials

28213 — BOLIVIA — Resins, cellulisics-thermo-plastics. Rivek–Ricardo Velasco Krüger y Asociados (importer, dist., retailer), Calle Loayza 371, P.O. Box 5797, La Paz. WTD 1/72.

Drugs

28314—NETHERLANDS — Diagnostic substances, other biologics, including allergenic extracts. Exclusive representations requested for Netherlands or Benelux countries. Will-Pharma N.V.; Attn: A.C. Caeyenberghs (importer, dist., agent), 3 Tweede Weteringplantsoen, Amsterdam. WTD 4/72.

28340—PAKISTAN — Pharmaceuticals. Requests catalogs, quotations, C. & F., Karachi. AFZAL Trading Corp. (importer, agent), 23, Sheikh Chambers, Near Light House, M.A. Jinnah Rd., Karachi. WTD 4/72.

28341—JAMAICA—Ethical drugs. Brochures, price list requested. Levy Bros. Ltd., Attn: Vernon da Silva (importer, dist., agent), 44 Port Royal St., Kingston. WTD 7/71.

28341—NETHERLANDS—Pharmaceutical preparations for human use. Exclusive representations requested for Netherlands or Benelux countries. Will-Pharma N.V.; Attn: A.C. Caeyenberghs (importer, dist., agent), 3 Tweede Weteringplantsoen, Amsterdam. WTD 4/72.

Soap, detergents, cleaning preparations, perfumes, cosmetics

28440—NEW ZEALAND — Cosmetics; male, female toiletries. Gillette (New Zealand) Ltd., Attn: P. Birch, Mng. Dir. (importer, dist., mfr.), P.O. Box 30369, Lower Hutt. WTD 4/72.

28441—SPAIN—Shaving preparations. Instituto de Dermatología Cosmética A.L.E.J.O. (mfr.), Avda. Menéndez Pelayo, 13, Madrid (9). WTD 4/72.

28443 — THAILAND — Hair-darkening cream for men, women with lanolin, non-greasy, non-alcoholic, preferably packed in tube. Requests catalogs, c.i.f. Bangkok prices. B.K.L. Asia Trading Ltd., Part. (importer, dist.), 19 & 25 Chalermkhet 1 Rd., Bangkok 1. WTD 4/71.

28444—SPAIN — Dentifrices, including mouthwashes, gargles, rinses. Instituto de Dermatología Cosmética A.L.E.J.O. (mfr.), Avda. Menéndez Pelayo, 13, Madrid (9). WTD 4/72.

Paints, varnishes, lacquers, enamels

28516 — GERMANY — Road marking paint. Ferd. Ickenroth (dist., agent, warehousing, truck transportation), 22 Alleestr., 543 Montabaur. WTD 4/72.

Gum, wood chemicals

28612—BOLIVIA—5,000 kls acetic acid 98%. Rivek–Ricardo Velasco Krüger y Asociados (importer, dist., agent), Calle Loayza 371, P.O. Box 5797, La Paz. WTD 1/72.

Chemical products

28930—THAILAND — Lithographic, offset inks. Requests c.i.f. Bangkok prices, literature, samples. P.S.T. Enterprise Ltd., Partnership (importer, dist., agent), 133/9 Rajprarop Road, Makasan, Bangkok. WTD 10/71.

Rubber footwear

30210—THAILAND—Boots made of rubber, canvas for military purposes. Requests c.i.f. Bangkok prices, catalogs, brochures. Athon Sawai & Sons Ltd. (importer, dist.), 1293/4–9 Paholyothin Rd., Bangkok. WTD 2/72.

Fabricated rubber products

30695—PORTUGAL — Rubber boats. SOFOMIL-Sociedade Fornecedora de Maquinas Industrais, Lda. (importer, dist., agent), Rua Joaquim Bonifacio 2–1º, (Apartado 1340), Lisbon. WTD in prep.

30697—THAILAND — Rubber nipples used for feeding babies. Requests c.i.f. Bangkok prices, catalogs. J. L. Sharma & Sons R.O.P. (importer, dist., retailer), 254 Second Fl., Siam Sq., Behind Lido Theater, Rama I Rd., Bangkok 5. WTD in prep.

30698—JAMAICA—Rubber bands, erasers. T. Geddes Grant (Dist.) Ltd., Attn: J. P. de St. Christo (importer dist., agent), 109 Marcus Garvey Dr., Kingston 11. WTD 4/72.

Glass, glassware

32291—JAMAICA—Table, kitchen, novelty glassware. Brochures, price list c.i.f. requested. Lee's Enterprise (importer, agent, retailer), 58 Princess St., Kingston. WTD in prep.

32293—BOLIVIA—Fiber glass. Rivek–Ricardo Velasco Krüger y Asociados (importer, dist., agent), Calle Loayza 371, P.O. Box 5797, La Paz. WTD 1/72.

Pottery, related products

32630 — BOLIVIA — Kitchenware, fine

earthware, household and commercial. Velho & Co. S.A. (importer, dist., agent), Avenida Camacho 1377, P.O. Box 144, La Paz. WTD in prep.

Steel mill products

33120 — ARGENTINA — Stainless steel products, e.g. sheet, tubing, wire. Area is location of portion of country's food processing machinery producers and market area for large quantity of stainless steel products used in such equipment. Meitar Aparatos (importer, mfr.), Aristóbulo del Valle 7090, Santa Fe, Pcia. de Santa Fé. WTD in prep.

33124—PAKISTAN—Steel plates—hot and cold rolled. Requests catalogs, quotations c. & f. Karachi. AFZAL Trading Corp. (importer, agent), 23, Sheikh Chambers, Near Light House, M.A. Jinnah Rd., Karachi. WTD 4/72.

33152 — BOLIVIA — Steel nails, spikes, brads. Velho & Co. S.A. (importer, dist., agent), Avenida Camacho 1377, P.O. Box 144, La Paz. WTD in prep.

Hand tools, general hardware

34231—SWEDEN—Hammers (not electric or pneumatic) to be used by furniture-makers, upholsterers. Lotisagent AB (importer, dist., agent), 134 Hornsgatan, S–117 28 Stockholm. WTD 4/72.

34294 — BOLIVIA — Padlocks, builders hardware. Velho & Co. S.A. (importer, dist., agent), Avenida Camacho 1377, P.O. Box 144, La Paz. WTD in prep.

Screw machine products

34510 — BOLIVIA — Household appliances, screw machine products. Velho & Co. S.A. (importer, dist., agent), Avenida Camacho 1377, P.O. Box 144, La. Paz. WTD in prep.

Metal stampings

34610—THAILAND—Steel or alloy helmets for military purposes. Requests c.i.f. Bangkok prices, catalogs, brochures. Athon Sawai & Sons Ltd. (importer, dist.), 1293/4–9 Paholyothin Rd., Bangkok. WTD 2/72.

Fabricated metal products

34920—AUSTRALIA—Safes of type that can be set in concrete floors. Mr. D. H. London, J. G. London & Co. Pty. Ltd. (importer), Abbotsford Rd., Q. Albion Q. 4010. WTD in prep.

34970—THAILAND—Aluminum foil for packaging cigarettes. Exclusive distributorship franchise wanted. Requests samples, c.i.f. Bangkok prices. B. Grimm & Co., R.O.P. (importer, dist., agent), 1643/4 Petchburi Rd., (Extension), P.O. Box 66, Bangkok. WTD in prep.

Engines, turbines

35191—NEW ZEALAND—Gasoline engines, 15 to 20 hp., for industrial, agricultural application. Brown Brothers Engineers Ltd., Attn: Neville Dodd (dist., mfr., agent), P.O. Box 548, Christchurch. WTD 5/71.

Farm machinery

35223—BOLIVIA—Machinery, parts for planting, seeding, fertilizing. Velho & Co. S.A. (importer, dist., agent), Avenida Camacho 1377, P.O. Box 144, La Paz. WTD in prep.

Construction, mining, materials handling machinery, equipment

35312—ARGENTINA—Tracklaying type tractors. Offers from manufacturing firms only. Exclusive agency. PAVEX, S.A. (importer, dist., agent), Sarmiento 470, Piso 3°, Ofic. 304, Buenos Aires. WTD 10/71.

35316—ARGENTINA—Truck mixers, pavers, related equipment. Offers from manufacturing firms only. Exclusive agency. PAVEX, S.A. (importer, dist., agent), Sarmiento 470, Piso 3°, Ofic. 304, Buenos Aires. WTD 10/71.

35316—SPAIN—Concrete mixers, pavers, related equipment. Tiktin, S.A. (importer, agent), Alcalá, 76, Madrid (9). WTD 4/72.

35318 — BOLIVIA — One construction crane 40 meters lift capacity. Rivek-Ricardo Velasco Krüger y Asociados (importer, dist., agent), Calle Loayza 371, P.O. Box 5797, La Paz. WTD 1/72.

35318—SPAIN—Scrapers, graders, rollers, and off-highway trucks, trailers, wagons. Tiktin, S.A. (importer, agent), Alcalá, 76, Madrid (9). WTD 4/72.

35320—PHILIPPINES—Mining machinery, equipment. IGRI Industrial Sales Corp., Attn: Eli R. Bicaldo (importer, dist., agent), 486 G. Araneta Blvd., Quezon City. WTD in prep.

35321 — BOLIVIA — Mining machinery and equipment; underground. Velho & Co. S.A. (importer, dist., agent), Avenida Camacho 1377, P.O. Box 144, La Paz. WTD in prep.

35340—BOLIVIA—One elevator for materials 40 mtrs lift capacity (for construction materials); one elevator for 6–8 person capacity with following specifications: height and space between floors from 2.70 to 3.50 meters; speed: 1.2 to 1.8 meters per second; elevator stps: from 12 to 15; approximate lift height: 37 to 40 meters. Rivek-Ricardo Velasco Krüger y Asociados (importer, dist., agent), Calle Loayza 371, P.O. Box 5797, La Paz. WTD 1/72.

53970 — AUSTRALIA — Trailers, low loaders. Wollongong Engineering Pty. Ltd., Attn: J. E. Badman, Gen. Mgr. (retailer), P.O. Box 1472, Wollongong N.S.W. 2500. WTD 3/71.

Metalworking machinery

35481—PORTUGAL—Rolling mill machinery, metal working equipment. SOFOMIL-Sociedade Fornecedora de Maquinas Industriais, Lda. (importer, dist., agent), Rua Joaquim Bonifacio 2–1°, (Apartado 1340), Lisbon. WTD in prep.

35481—VENEZUELA—Wire fabricating machinery and equipment; grinders; coil winding machines; chipping hammers, electric; shear knives; threading rolls; thread cutting dies; rolling mill machinery, equipment. Maquinarias Uhri, S.R.L., Attn: Mr. Americo Uhri (importer, agent), Apartado 50.984, Caracas. WTD in prep.

Special industry machinery

35511—MALAYSIA — Dairy processing equipment. Euco Engineers Sdn. Bhd. (importer, dist., agent), 2 Jalan Mountbatten, Kuala Lumpur. WTD 4/72.

35513—AUSTRIA—Advanced packaging machines, particularly for plastics packaging, i.e., shrink tunnels, bag sealing machines, other machines using plastics film for wrapping purposes. Anton Mosburger Aktiengesellschaft (mfr., exporter), Ketzergasse 112, A-1234 Wien-Siebenhirten. WTD 4/72.

35513—FRANCE—Pick-out fingers for plucking machines, shackles for plucking machines (poultry processing). Raoul Saporta Département Matériel (importer, agent), 45 rue de Suez, 13–Marseille 7. WTD in prep.

35513—PORTUGAL—Sugar plant, beverage bottling machinery. SOFOMIL-Sociedade Fornecedora de Maquinas Industriais, Lda. (importer, dist., agent), Rua Joaquim Bonifacio 2–1°, (Apartado 1340), Lisbon. WTD in prep.

35522 — BOLIVIA — Textile machinery parts, attachments. Velho & Co. S.A. (importer, dist., agent), Avenida Camacho 1377, P.O. Box 144, La Paz. WTD in prep.

35552 — THAILAND — Photoengraving, lithographing platemaking equipment, engravers' materials, other related equipment for offset lithographic printing. Requests c.i.f. Bangkok prices, catalogs. P.S.T. Enterprise Ltd., Partnership (importer, dist., agent), 133/9 Rajprarop Rd., Makasan, Bangkok. WTD 10/71.

35593—VENEZUELA—Compression, extrusion, injection and vacuum type plastic-working machinery. Maquinarias Uhri, S.R.L., Attn: Mr. Americo Uhri (importer, agent), Apartado 50.984, Caracas. WTD in prep.

General industrial machinery

35641—TAIWAN—Industrial fans, blowers. Shin Yung Trading Co., Ltd. (importer, agent, exporter), 87 Chang An West Rd., Taipei 102. WTD in prep.

35662—NEW ZEALAND—Transmission equipment: clutches, both centrifugal and manual, suitable for Briggs and Stratton engines, 0 to 20 brake horsepower. Brown Brothers Engineers Ltd., Attn: Neville Dodd (dist., mfr., agent), P.O. Box 548, Christchurch. WTD 5/71.

35673—FRANCE — Integrated electric heating system with ventilation, automatic draught control. Ets Elm Leblanc (dist., mfr.), 123, blvd. Diderot, 93–Drancy. WTD in prep.

35690—GERMANY—Filter units for use in pollution control. Koehler, Siegfried, Ingenieurbuero (dist., agent, consulting engineer), 6350 Bad Nauheim, Postf. 1304. WTD 3/72.

Office, computing, accounting machines

35731—ENGLAND—Products associated with computers, peripherals for process control and automation. Warren Point Ltd. (mfr., retailer), Prospect Place, Welwyn, Hertfordshire. WTD 3/72.

35733—ENGLAND — Vertical visible quick random access filing equipment for edge-punched cards and paper tape; forms handling equipment (bursters, decollators). Computerproof Ltd. (dist., agent), 203/4 Gazette Bldgs., 168 Corporation St., Birmingham 4. WTD in prep.

35733—ENGLAND—Computer software products for general purpose use. Computer Co-operatives Ltd. (importer, dist., export), Institute Bldg., Ward St., Guildford, Surrey. WTD in prep.

35733—ENGLAND—Any products in data processing field excluding paper tape equipment, data preparation equipment, remote terminals and line printers, items which this firm now manufactures. Data Dynamics Ltd. (importer, dist., mfr.), Data House, Springfield Rd., Hayes, Middlesex. WTD in prep.

35733—**ENGLAND**—Computerized banking financial systems, associated software. Paternoster Computer Services Ltd. (dist., mfr., retailer), 1 Paternoster Row, St. Pauls, London, EC4P 4HP. WTD in prep.

35731—**FRANCE**—Computer peripherals, particularly badge readers. Promodata (importer, agent), one, rue Lord Byron, Paris 8e. WTD 6/71.

35731—**FRANCE**—Minicomputer exclusively for use in controlling machine tools. Computer would control several machine tools simultaneously. General business computers not acceptable. MEGEX (importer, agent), 10, rue Lacordaire, Paris 15e. WTD 4/72.

Service industry machinery

35853—**FRANCE**—Industrial refrigeration equipment. Exclusive rights required. P. H. Ballar (importer, dist., agent), 12, Ave. Montaigne, 75–Paris 8e. WTD in prep.

35892—**FRANCE**—Waste compactors. Locaner (mfr.), Domaine des Roches, Route de Malesherbes, 77-Buthier. WTD in prep.

35892—**GERMANY**—Road maintenance machines, such as sweeping machines, cleaning machines for road side planks, dispensing machines for road marking paint, road salt. Ferd. Ickenroth (dist., agent, warehousing, transportation), 22 Alleestr., 543 Montabaur. WTD 4/72.

35892—**JAPAN**—Equipment for treatment of waste water and sewage on board ships; from trains to be installed at train terminals; in factories. Samban Shoji Co., Ltd. (agent), Room 602, Hasebe Bldg., 23-5 Hiroo 5-chome, Shibuya-ku, Tokyo. WTD in prep.

35892—**PORTUGAL**—Water treating equipment, solid waste disposal machinery. SOFOMIL-Sociedade Fornecedora de Maquinas Industriais, Lda. (importer, dist., agent), Rua Joaquim Bonifacio 2-1? (Apartado 1340), Lisbon. WTD in prep.

Electrical industrial apparatus

36220 — **ISRAEL** — Electronic controls, control accessories, industrial, including electronic timing devices, manufacturing and process control equipment. I. C. International Consultants (Israel) Ltd. (agent, business consultants), Hadar Daphna Bldg. "D"–Suite No. 412, 39 Shaul Hamelech St., Tel Aviv. Cable address: ICConsult TELAVIV. WTD in prep.

Household appliances

36343 — **AUSTRALIA** — Electrical ice-cream buckets for use in homes, 230v. 50 cycle a.c. Mr. M. A. Guilfoyle (importer), P.O. Box 1557, Cairns 4870, Queensland. WTD in prep.

36321—**FRANCE**—Household refrigerators including small refrigerators for pleasure boats, motor vehicles. Exclusive rights required. P. R. Ballar (importer, dist., agent), 12, Ave. Montaigne, 75–Paris 8e. WTD in prep.

Radio, television receiving sets

36520—**MALAYSIA**—Video tapes. Euco Engineers Sdn. Bhd. (importer, dist., agent), 2 Jalan Mountbatten, Kuala Lumpur. WTD 4/72.

Communication equipment

36611—**ETHIOPIA**—Telephone switching, switchboard equipment. N. E. Papassinos (importer, dist., agent), Cunningham St., P. O. Box 1698, Addis Ababa. WTD 3/72.

36621 — **MALAYSIA** — Microwave telephone communication equipment. Euco Engineers Sdn. Bhd. (importer, dist., agent), 2 Jalan Mountbatten, Kuala Lumpur. WTD 4/72.

36623—**AUSTRALIA**—Alarm and signal systems, electric or electronic. Mr. David Munro, Action Electrical Co. (mfr., agent, retailer), 56 Merthyr Rd., New Farm Q. 4005. WTD 4/72.

36626—**FRANCE**—Electronic measuring instruments, particularly X-Y recorders. Metrel (importer, agent), 4, allée de Rabelais, 93–Clichy sous Bois. WTD in prep.

36626—**GERMANY**—Electronic military, industrial and commercial equipment. Neuzeitliche Elektro- und Motorentechnik GmbH. (importer, dist., agent), 16 Schloss Str., POB 1547, 5400 Koblenz. WTD 4/72.

Electronic components, accessories

36730 — **JAPAN** — Image intensification tubes for star vision or low light level television. Nippon Aircraft Supply Co., Ltd. (importer, dist., agent), Shin Toranomon Jitsugyo Kaikan, 5 Shiba Toranomon, Minato-ku, Tokyo. WTD in prep.

36740—**ITALY**—Semiconductors. Pasini Elettronica S.p.A. (dist.), Via Antonio da Recanate 4, Milan. WTD 2/72.

36790—**ENGLAND**—Edge punched cards for data processing. Computerproof Ltd. (dist., agent), 203/4 Gazette Bldgs., 168 Corporation St., Birmingham 4. WTD in prep.

36795 — **FRANCE** — Electronic components, microwave. Société Moderne d'Hyperfréquence (dist., mfr.), Rue Vladimir Komarov, 78–Trappes. WTD in prep.

Electrical machinery, equipment

● 36900 — **CEYLON** — X-ray equipment for neuro radiology including generator, control unit, tables, stands, and film processing equipment. Tender No. 72/24. Bid deadline May 30. Department of Health, P.O. Box 584, Colombo, Ceylon. Specifications available from Embassy of Ceylon 2148 Wyoming Avenue, N.W., Washington, D.C., 20008.

36930—**ITALY**—Electrotherapeutic apparatus. Oude Delft Italiana, S.r.l. (importer, dist.), Via dei Tizii 4, 00185 Rome. WTD 4/72.

Motor vehicles, equipment

37141—**NEW ZEALAND**—Torque converters, variable ratio, V-belt, for all-terrain vehicles. Wide range desirable, but immediate requirement for use with 15 hp. Briggs and Stratton 4-stroke engines. Brown Brothers Engineers Ltd., Attn: Neville Dodd (dist., mfr., agent), P.O. Box 548, Christchurch. WTD 5/71.

Aircraft, parts

37211—**THAILAND**—Military aircraft, fixed, rotary wing. Requests c.i.f. Bangkok prices, catalogs, brochures. Athon Sawai & Sons Ltd. (importer, dist.), 1293/4–9 Paholyothin Rd., Bangkok. WTD 2/72.

Ship building, repairing

37312—**THAILAND**—Patrol boats. Requests c.i.f. Bangkok prices, catalogs, brochures. Athon Sawai & Sons Ltd. (importer, dist.), 1293/4–9 Paholyothin Rd., Bangkok. WTD 2/72.

Engineering, laboratory, scientific, research instruments

38112—**FRANCE**—Laboratory, scientific instruments based on lasers, other electro-optics applications. Société Cedis (mfr.), 11, rue Marius Franay, 92–Saint-Cloud. WTD in prep.

38112—**IRAN**—Laboratory and scientific instruments. Quantities, specifications to be determined through direct correspondence. Exclusive agency. Owzan Co., Ltd. (importer, dist., agent), 290 Villa Ave., Tehran. WTD 4/72.

38112—**ITALY**—Clinical analysis laboratory instruments. Oude Delft Italiana, S.r.l. (importer, dist.), Via dei Tizii 4, 00185 Rome. WTD 4/72.

38112—**MALAYSIA**—Laboratory, scientific instruments. Euco Engineers Sdn. Bhd. (importer, dist., agent), 2 Jalan Mountbatten, Kuala Lumpur. WTD 4/72.

Instruments for measuring, indicating, controlling, physical characteristics

38213—**GERMANY**—Ecologic control instruments. Koehler, Siegfried, Ingenieurbuero (dist., agent, consulting engineer), 6350 Bad Nauheim, Postfach 1304. WTD 3/72.

38213 — **GERMANY** — Thermistors, thermistor probes for industrial, professional applications. Industrial Electronics GmbH. (importer, dist., agent), 6000 Frankfurt/Main, Klueberstr. 14. WTD 11/71.

38213—**GERMANY** — Instruments for control of industrial processes; for measurement of process variables, for application in manufacture of synthetic resins, lacquers. Original Hanau Quarzlampen GmbH., Attn: Mr. Hass (mfr.), 6450 Hanau, Postfach 642. WTD 4/72.

38216 — **AUSTRALIA** — Fire detection systems for all types of buildings. Action Electrical Co., Attn: David Munro (mfr., agent, retailer), 56 Merthyr Rd., New Farm, Q. 4005. WTD 4/72.

Optical instruments, lenses

38311—**MALAYSIA**—Microscopes. Euco Engineers Sdn. Bhd. (importer, dist., agent), 2 Jalan Mountbatten, Kuala Lumpur. WTD 4/72.

Surgical, medical, dental instruments

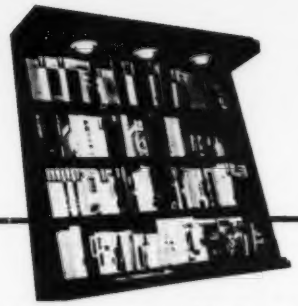
38410—**FRANCE**—Surgical and medical instruments, apparatus (light, elementary types). Etablissements Deschamps (dist., mfr.), 2, rue de la Bastille, 44–Nantes. WTD in prep.

38410—**IRAN**—Surgical, medical instruments, apparatus. Types, specifications to be determined through direct correspondence. Mr. Yousef S. Rokhsar, Iran Jarah Co. (importer, dist., agent), P.O. Box 11/1672, Tehran. WTD 4/72.

38410—**ITALY**—Medical diagnostic apparatus. Oude Delft Italiana, S.r.l. (importer, dist.), Via dei Tizii 4, 00185 Rome. WTD 4/72.

38410 — **NEW ZEALAND** — Surgical products. Gillette (New Zealand) Ltd., Attn: P. Birch, Mng. Dir. (importer, dist., mfr.), P.O. Box 30369, Lower Hutt. WTD 4/72.

38430—**MALAYSIA**—Dental equipment. Euco Engineers Sdn. Bhd. (importer, dist., agent), 2 Jalan Mountbatten, Kuala Lumpur. WTD 4/72.



New Publications

When ordering any publications, indicate title and series designation, if indicated, and make checks or money orders payable to the Superintendent of Documents. Orders should be sent to the U.S. Department of Commerce, Washington, D.C. 20230, or to any of its field offices.

DOMESTIC AND INTERNATIONAL BUSINESS

BUREAU OF DOMESTIC COMMERCE

Construction review. Monthly industry report. March, Vol. 18, No. 3. Annual subscription $6.50 ($1.75 additional for foreign mailing). Single copy 55¢. Featured in this issue: State building code profile.

U.S. industrial outlook 1972—with projections to 1980. April 1972. 430pp. $3.75. This publication presents narrative and statistical analyses on an industry-by-industry basis for major manufacturing and non-manufacturing sectors of the U.S. economy.

BUREAU OF INTERNATIONAL COMMERCE

Export control bulletin—supplement to Export Control Regulations (ECB-OEC-61). Single copy 40¢.

Overseas Business Reports

Annual subscription $16 ($5 additional for foreign mailing). Single copy 15¢.
Basic data on the economy of Chile (OBR 72-002). March. Supersedes OBR 68-3.

Foreign Economic Trends

Annual subscription $15 ($6 additional for foreign mailing). Single copy 10¢.
Central African Republic (ET 72-024). 8pp.
Venezuela (ET 72-025). 12pp. ET 71-088.
Bermuda (ET 72-026).

International Marketing Information Service

World Markets for U.S. Exports
Air-conditioning and refrigeration equipment—Korea (IMIS 72-210). March. 12pp. 10¢.

ECONOMIC AFFAIRS

SOCIAL AND ECONOMIC STATISTICAL ADM.

BUREAU OF THE CENSUS

Congressional District Data

Districts of the 93rd Congress:
Illinois (CDD-93X-11). 12pp. 25¢.
Mississippi (CDD-93X-22). 4pp. 25¢.

Agriculture

Report on cotton ginnings for the crop of 1971, by counties (A20: 7-16). 6pp. 10¢.

Construction and housing

Value of new construction put in place: February 1972 (C30-72-2). Annual subscription $2.50, includes monthly and annual supplement. Single copy 25¢.

1970 Census of Housing

Detailed Housing Characteristics:
Louisiana (HC(1)-B20). 195pp. $2.
Nebraska (HC(1)-B29). 179pp. $2.
West Virginia (HC(1)-B50). 155pp. $2.

Distribution and services

Monthly retail trade—sales and accounts receivable: February 1972 (BR-72-2). 36pp. 25¢.

Monthly wholesale trade: February 1972 (BW-72-2). 20pp. Annual subscription $1.50 (50¢ additional for foreign mailing). Single copy 15¢.

Monthly department store sales in selected areas: February 1972 (BD-72-2). 12pp. Annual subscription $1. Single copy 10¢.

Estimated retail sales of U.S. stores for week ending April 15 (CB 72-106). 2pp. 10¢.

Estimated retail sales of U.S. stores for week ending April 22. 2pp. 10¢.
Final weekly retail sales estimates: 1967 through 1971 (supplement) (BRIO-71S). 12pp. 10¢.

Foreign Trade

Exports—commodity by country: January 1972 (FT 410-72-1). Annual subscription $33 ($8.25 additional for foreign mailing). Single copy $2.75.

Imports—commodity by country: January 1972 (FT 135-72-1). Annual subscription $21 ($5.25 additional for foreign mailing). Single copy $1.75.

Puerto Rico and U.S. possessions: December 1971 (FT 800-71-12). Annual subscription $2.50 (75¢ additional for foreign mailing). Single copy 20¢.

Bunker fuels: February 1972 (FT 810-72-2). Annual subscription $1. Single copy 10¢.

Government

City employment in 1971 (GE 71, No. 2). 20pp. 50¢.

Public employment in 1971 (GE 71, No. 1). 40pp. 40¢.

Environmental quality control—special studies No. 61—expenditure and employment for selected large governmental units: fiscal 1969-70. 60pp. 55¢.

Industry

Annual survey of manufactures: 1969—general statistics for divisions and States (M69(AS)-6.0). 2pp. 25¢.

Annual survey of manufactures: 1970—value of product shipments (M70(AS)-2). 48pp. 25¢.

Annual survey of manufactures: 1970—value of manufacturers' inventories (M70(AS)-3). 20pp. 25¢.

Annual survey of manufactures: 1970—expenditures for new plant and new equipment (M70(AS)-5). 20pp. 25¢.

Aluminum ingot and mill products: summary for 1971 (preliminary) (Series: M33-2(71)-13). 2pp. $1.50 per year. Single copy 15¢.

Truck trailers: summary for 1971 (Series: M37L(71)-13). 12pp. $1.50 per year. Single copy 15¢.

Copper-base mill and foundry products: fourth quarter 1971 (Series: BDSAF-84(71)-4). $1 per year. Single copy 25¢.

Metalworking machinery: fourth quarter 1971 (Series: MQ-35W(71)-4). 12pp. $1 per year. Single copy 25¢.

Growth and labor characteristics of manufacturing industries. 10pp. 50¢.

Population

Illustrative population projections for the United States: the demographic effects of alternate paths to zero growth (Series P-25, No. 480). 38pp. 40¢.

Estimates of the population of the United States and components of change: 1940 to 1972 (Series P-25, No. 481). 14pp. 15¢

1970 Census of Population

General Social and Economic Characteristics:
Alabama (PC(1)-C2). 343pp. $2.25.
Delaware (PC(1)-C9). 157pp. $1.25.
Georgia (PC(1)-C12). 479pp. $3.25.
Minnesota (PC(1)-C25). 336pp. $2.25.
Tennessee (PC(1)-C44). 335pp. $2.25.
Washington (PC(1)-C49). 267pp. $2.

Census Tracts

This report presents statistics by census tract on the characteristics of the population and housing units:

Altoona, Pa. standard metropolitan statistical area (PHC(1)-7). 50pp. 50¢.

Atlanta, standard metropolitan statistical area (PHC(1)-14). 192pp. and one map. $2.

Baton Rouge standard metropolitan statistical area (PHC(1)-20). 86pp. and one map. $1.

Bryan-College Station, Tex. standard metropolitan statistical area (PHC(1)-34). 52pp. 45¢.

Davenport-Rock Island-Moline, Iowa-Ill. standard metropolitan statistical area (PHC(1)-53). 92pp. $1.50.

Denver, Colo. standard metropolitan statistical area (PHC(1)-56). 248pp. and two maps. $2.25.

Duluth-Superior, Minn.-Wis. standard metropolitan statistical area (PHC(1)-60). 80pp. and one map. $1.

Durham, N.C. standard metropolitan sta-

tistical area (PHC(1)-61). 84pp. 70¢.

Lancaster, Pa. standard metropolitan statistical area (PHC(1)-105). 112pp. $1.25.

Lubbock, Tex. standard metropolitan statistical area (PHC(1)-120). 60pp. 50¢.

Miami, Fla. standard metropolitan statistical area (PHC(1)-129). 220pp. $2.

Gainesville, Fla. standard metropolitan statistical area (PHC(1)-77). March 1972. 60pp. 55¢.

Muncie, Ind. standard metropolitan statistical area (PHC(1)-137). 64pp. 55¢.

Nashville-Davidson standard metropolitan statistical area (PHC(1)-139). 94pp. $1.25.

New Britain, Conn. standard metropolitan statistical area (PHC(1)-141). 60pp. 50¢.

Norwalk, Conn. standard metropolitan statistical area (PHC(1)-149). 60pp. 50¢.

Peoria, Ill. standard metropolitan statistical area (PHC(1)-158). 88pp. 70¢.

Raleigh standard metropolitan statistical area (PHC(1)-170). 88pp. 70¢.

Rockford, Ill. standard metropolitan statistical area (PHC(1)-177). 72pp. $1.25.

San Angelo, Tex. standard metropolitan statistical area (PHC(1)-185). 60pp. 50¢.

San Antonio standard metropolitan statistical area (PHC(1)-186). 178pp. and 1 map. $1.75.

Savannah standard metropolitan statistical area (PHC(1)-193). 76pp. $1.

Scranton, Pa. standard metropolitan statistical area (PHC(1)-194). 72pp. 60¢.

Sherman-Denison, Tex. standard metropolitan statistical area (PHC(1)-196). 60pp. 50¢.

SCIENCE AND TECHNOLOGY

ENVIRONMENTAL RESEARCH LABORATORIES

Preliminary determination of epicenters. Monthly listings. January 1972. Annual subscription $1.50 (50¢ additional for foreign mailing). Single copy 15¢.

Geology and geophysics of the Venezuelan continental margin between Blanquilla and Orchilla Islands (ERL 226-AOML 6). 92pp. 75¢. A study of the geology of the continental margin of northeast Venezuela conducted by marine magnetic, gravity, seismic reflection, and bathymetric investigations, and by a program of dredging of submarine rock outcrops.

NATIONAL BUREAU OF STANDARDS

NBS papers on underground corrosion of steel piling: 1962-71 (Monogr. 127). 72pp. 65¢.

The ideal Lovibond color system for CIE standard illuminants A and C shown in three colorimetric systems (Tech. Note 716). 124pp. $1.

Standard reference materials: thermoelectric voltage of silver-28 atomic percent gold thermocouple wire, SRM 733, versus common thermocouple materials (between liquid helium and ice fixed points) (Spec. Publ. 260-34). 34pp. 40¢.

Standard reference materials: thermal conductivity of austenitic stainless steel, SRM 735, from 5 to 280 K (Spec. Publ. 260-35). 32pp. 35¢.

The international system of units (SI) (Spec. Publ. 330). 1972, 45pp. 30¢.

A simple hydraulic sinusoidal pressure calibrator (Tech. Note 720). 27pp. 35¢.

NATIONAL TECHNICAL INFORMATION SERVICE

Order the following reports on Government-sponsored research from: National Technical Information Service, 5285 Port Royal Rd., Springfield, Va. 22151. Make check or money order payable to National Technical Information Service.

Reports showing **domestic outlays of federal funds** are available. Reports show outlays under each program or appropriation, by county and large city where the outlay was made. Outlays are summarized at the national and state levels by agency, program, and function. To obtain a list of these reports, request a free copy of FA 72-105 from the National Technical Information Service.

Active research projects report—fiscal year 1972 (PB-207 553). National Environmental Research Center, Cincinnati. Paper copy $9. 642pp.

The economic effectiveness of mandatory engine maintenance for reducing vehicle exhaust emissions (PB-207 174). TRW Systems Group, Redondo Beach, Calif. 93pp.

Cumulative regulatory effects on the cost of automotive transportation (Recat) (PB-207 713). Ad Hoc Committee on the Cumulative Regulatory Effects on the Cost of Automotive Transportation, Washington, D.C. 362pp. Paper copy $6.75.

Foreign health services research and development: information and information sources (PB-207 843). Capital Systems Group, Inc., Bethesda, Md., for NCHSRD. 204pp. Paper copy $6.75. Identifies numerous professional journals, bibliographic services, and health research-related organizations.

Health services research and development abroad: a selected bibliography (PB-207 847). Capital Systems Group, Inc., Bethesda, Md., for NCHSRD. 166pp.

Availability of limestones and dolomites (PB-206 963). M. W. Kellogg Co., Piscataway, N.J. 267pp.

Mass-produced foundations for mass-produced houses (PB-207 818). Virginia Polytechnic Inst. 44pp. Discusses foundation bents and building and bent interface, bent erection procedures, and typical architectural applications.

Wood in the construction of mass-produced houses (PB-207 812). Virginia Polytechnic Institute. 28pp.

A selective bibliography of computers in architecture (PB-207 817). Univ. of Sydney (Australia). 8pp. Lists articles in the areas of management, technical, documentation, computer-aided design, graphics, man-machine interaction, and general use.

Fabrication and cost evaluation of experimental building brick from waste glass (PB-208 007). Bureau of Mines, Washington, D.C. 38pp.

Catalog of Federal Domestic Assistance: magnetic tape of program description text and coded characteristics (1971 updated) (PB-207 823). Office of Management and Budget, Washington, D.C. $55, 1 reel (please specify recording mode desired: (1) 7-track 556 or 800 BPI and odd or even parity, or (2) 9-track, 800 BPI, odd parity). Tape contains 1,069 programs with a characteristics record consisting of coded text-related information included for each program.

Compulsive gamblers (PB-207 602). Princeton Univ. Paper copy $5.45. 125pp. Investigates psychological and social aspects of compulsive gambling. Report discusses types of people that become compulsive gamblers, the way they organize their lives in order to gamble, problems their gambling creates, and ways they try to solve problems created by their gambling.

The following reports concerning the engineering feasibility of constructing a sea-level canal between the Atlantic and Pacific oceans are available. The final report discusses Isthmian canal interests of the United States and other nations, potential canal traffic and revenues, excavation by nuclear methods, general criteria, environmental considerations, analysis of alternatives, financial feasibility, and management of sea-level canal construction and operation. Included are summary sections on each of the five Annex studies conducted as part of the overall study. The detailed reports comprising the various Annex studies will be announced as they become available:

Interoceanic canal studies—1970 (Final Report) (AD-721 417) Atlantic-Pacific Interoceanic Canal Study Commission, 1,029pp. Paper copy $12.

Same Title, Annex V—Study of Engineering Feasibility, (AD-721 167) 374pp. papaper copy $6. Covers basic considerations, evaluation of routes, comparison of most promising alternatives, and project execution.

Same Title, Annex V, Vol. I: Appendixes 1-4. (AD-721 168) 263pp. Covers description of routes; conventional and nuclear excavation technology; and project management, organization, and funding.

Same Title, Annex V, Vol. II: Appendixes 5-8. (AD-721 169) 223pp. Discusses tidal hydraulics, navigation in confined channels, area sanitation and health measures, and operation and maintenance.

Same Title, Annex V, Vol. III: Appendixes 9-11. (AD-721 170) 294pp. Discusses modernization and improvement plans for lock canal, and routes 10, 14, 5, and 8.

Same Title, Annex V, Vol. IV: Appendixes 12-13. (AD-721 171) 507pp. Paper copy $6. Discusses routes 17, 25, and 23.

Same Title, Annex V, Vol. V: Appendixes 15-16, (AD-721 172) 293pp. Covers organization, conduct, and cost of the study; and marine ecology.

Same Title, Annex V, Vol. VI: Appendix 17. (AD-721 173) 204pp. Bibliography.

Survey of the environmental conditions incident to the transportation of materials (PB-204 442). General American Transportation Corp. for the Dept. of Transportation. 225pp. Information describing conditions of vibration, shock, impact, heat, cold, compression, puncture, abrasion, humidity, and temperature.

Ambulatory care: planning and organization (PB-204 925). Health and Hospital Planning Council of Southern New York for the National Center for Health Services Research and Development. 569pp. $6.

Biological and oceanographic conditions for the formation of commercial concentrations of fish (TT-67-59063). Translated from the Russian. 458pp. $6.

☆ U. S. Government Printing Office: 1972—481-356/22

Commerce Department Directory

Commerce Building, 14th Street and Constitution Avenue, Washington, D.C. 20230

Phone (202) 783-9200

PETER G. PETERSON, Secretary of Commerce

JAMES T. LYNN, Under Secretary of Commerce

SECRETARIAL OFFICERS

ROBERT A. PODESTA, Asst. Secretary for Economic Development (Economic Development Administration)

LARRY A. JOBE, Asst. Secretary for Administration

HAROLD C. PASSER, Asst. Secretary for Economic Affairs (Social and Economic Statistics Administration)

J. H. WAKELIN, JR., Asst. Secretary for Science and Technology

ANDREW E. GIBSON, Asst. Secretary for Maritime Affairs (Maritime Administration)

C. LANGHORNE WASHBURN, Asst. Secretary for Tourism (U.S. Travel Service)

WILLIAM N. LETSON, General Counsel

HAROLD B. SCOTT, Asst. Secretary for Domestic and International Business

HEADS OF OPERATING UNITS

ROBERT M. WHITE, National Oceanic and Atmospheric Administration

WILLIAM V. HOYT, Office of Foreign Direct Investments

ROBERT GOTTSCHALK, Patent Office

LAWRENCE M. KUSHNER (acting), National Bureau of Standards

GEORGE H. BROWN, Bureau of the Census

MARINUS van GESSEL (acting) Bureau of International Commerce

HUDSON B. DRAKE, Bureau of Domestic Commerce

GEORGE JASZI, Bureau of Economic Analysis

ARMIG G. KANDOIAN, Office of Telecommunications

WILLIAM T. KNOX, National Technical Information Service

JOHN L. JENKINS, JR., Office of Minority Business Enterprise

OMBUDSMAN FOR BUSINESS
Thomas E. Drumm, Jr.

BUSINESS SERVICES FIELD OFFICES

ALBUQUERQUE, N.MEX., 87101, U.S. Courthouse. Area Code 505, 843-2386.

ANCHORAGE, ALASKA, 99501, 632 West Sixth Ave., Hill Bldg., Suite 412, Area Code 907, 272-6531.

ATLANTA, GA., 30309, Suite 523, 1401 Peachtree St., NE. Area Code 404, 526-6000.

BALTIMORE, MD., 21202, 415 U.S. Customhouse, Gay and Lombard Sts. Area Code 301, 962-3560.

BIRMINGHAM, ALA., 35205, Suite 200-201, 908 S. 20th St. Area Code 205, 325-3327.

BOSTON, MASS., 02116, 10th Floor, 441 Stuart St. Area Code 617, 223-2312.

BUFFALO, N.Y., 14202, Room 910, Federal Bldg., 111 W. Huron St., Area Code 716, 842-3208.

CHARLESTON, S.C., 29403, Federal Bldg., Suite 631, 334 Meeting St. Area Code 803, 577-4171.

CHARLESTON, W.VA., 25301, 3000 New Federal Office Bldg., 500 Quarrier St. Area Code 304, 343-6181 Ext. 375 and 376.

CHEYENNE, WYO., 82001, 6022 Federal Bldg., 2120 Capitol Ave. Area Code 307, 778-2220.

CHICAGO, ILL., 60604, 1486 Dirksen Bldg., 219 S. Dearborn St. Area Code 312, 353-4461.

CINCINNATI, OHIO, 45202, 8028 Federal Office Bldg., 550 Main St. Area Code 513, 684-2944.

CLEVELAND, OHIO, 44114, Room 600, 666 Euclid Ave. Area Code 216, 522-4750.

DALLAS, TEX., 75202, Room 3E7, 1100 Commerce St. Area Code 214, 749-3287.

DENVER, COLO., 80202, Room 165, New Custom House, 19th and Stout Sts., Areas Code 303, 837-3246.

DES MOINES, IOWA, 50309, 609 Federal Bldg., 210 Walnut St. Area Code 515, 284-4222.

DETROIT, MICH., 48226, 445 Federal Bldg. Area Code 313, 226-6088.

GREENSBORO, N.C., 27402, 203 Federal Bldg., W. Market St., P.O. Box 1950, Area Code 919, 275-9111.

HARTFORD, CONN., 06103, Room 610-B, Federal Office Bldg., 450 Main St. Area Code 203, 244-3530.

HONOLULU, HAWAII, 96813, 286 Alexander Young Bldg., 1015 Bishop St. Area Code 808, 546-8694.

HOUSTON, TEXAS, 77002, 201 Fannin, 1017 Federal Office Bldg., Area Code 713, 226-4231.

JACKSONVILLE, FLA., 32202, P.O. Box 35087, 400 W. Bay St. Area Code 904, 791-2796.

KANSAS CITY, MO., 64106, Room 1840, 601 E. 12th St. Area Code 816, 374-3141.

LOS ANGELES, CALIF., 90024, 11th Floor, Federal Bldg., 11000 Wilshire Blvd. Area Code 213, 824-7591.

MEMPHIS, TENN., 38103, 710 First American Bank Bldg., 147 Jefferson Ave. Area Code 901, 534-3214.

MIAMI, FLA., 33130, Rm. 821, City National Bank Bldg., 25 W. Flagler St. Area Code 305, 350-5267.

MILWAUKEE, WIS., 53203, Straus Bldg., 238 W. Wisconsin Ave. Area Code 414, 224-3473.

MINNEAPOLIS, MINN., 55401, 306 Federal Bldg., 110 S. Fourth St. Area Code 612, 725-2133.

NEW ORLEANS, LA., 70130, 909 Federal Office Bldg., S., 610 South St. Area Code 504, 527-6546.

NEW YORK, N.Y., 10007, 41st Floor, Federal Office Bldg., 26 Federal Plaza, Foley Sq. Area Code 212, 264-0634.

PHILADELPHIA, PA., 19107, Jefferson Bldg., 1015 Chestnut St. Area Code 215, 597-2850.

PHOENIX, ARIZ., 85004, 508 Greater Arizona Savings Bldg., 112 N. Central Ave. Code 602, 261-3285.

PITTSBURGH, PA., 15222, 431 Federal Bldg., 1000 Liberty Ave., Area Code 412, 644-2850.

PORTLAND, ORE., 97205, 921 S.W. Washington St., Suite 501, Pittock Block, Area Code 503, 221-3001.

RENO, NEV., 89502, 2028 Federal Bldg., 300 Booth St. Area Code 702, 784-5203.

RICHMOND, VA., 23240, 2105 Federal Bldg., 400 N. 8th St. Area Code 703, 782-2246.

ST. LOUIS, MO., 63103, 2511 Federal Bldg., 1520 Market St. Area Code 314, 622-4243.

SALT LAKE CITY, UTAH, 84111, 1203 Federal Bldg., 125 S. State St., Area Code 801, 524-5116.

SAN FRANCISCO, CALIF., 94102, Federal Bldg., Box 36013, 450 Golden Gate Ave. Area Code 415, 556-5864.

SAN JUAN, P.R., 00902, Room 100, Post Office Bldg., Area Code 809, 723-4640.

SAVANNAH, GA., 31402, 235 U.S. Courthouse and Post Office Bldg., 125-29 Bull St. Area Code 912, 232-4321.

SEATTLE, WASH., 98104, 8021 Federal Office Bldg., 909 First Ave. Area Code 206, 442-5615.

UNITED STATES
GOVERNMENT PRINTING OFFICE
DIVISION OF PUBLIC DOCUMENTS
WASHINGTON, D.C. 20402

OFFICIAL BUSINESS

POSTAGE AND FEES PAID
U.S. GOVERNMENT PRINTING OFFICE

First-Class Mail

U.S.MAIL

CR - MAY 46129
UNIVERSITY MICROFILMS
SERIALS SECTION
300 NORTH ZEEB RD 48106
ANN ARBOR MICH

Concerned with Economics?

Leading Academic, Business, and Government Economists Explore How Measuring Economic Activity Could and Should Be Improved in

ECONOMIC ACCOUNTS OF THE UNITED STATES: RETROSPECT AND PROSPECT

a must on your reading list

if you are a . . .

- PROFESSIONAL ECONOMIST
- TEACHER OR STUDENT OF ECONOMICS
- BUSINESSMAN
- GOVERNMENT OFFICIAL

and you need . . .

- BETTER UNDERSTANDING
- IDEAS FOR RESEARCH TOPICS
- OVERVIEW OF PROBLEM AREAS
- HISTORICAL BACKGROUND OF THE U.S. ECONOMIC ACCOUNTS

Send to
Superintendent of Documents
U.S. Government Printing Office
Washington, D. C. 20402

Charge this order to my Deposit Account No. _____

FOR USE OF SUPT. DOCS.	

Enclosed is $ _____ for _____ copies of the 50th ANNIVERSARY ISSUE of the SURVEY OF CURRENT BUSINESS, Economic Accounts of the United States: Retrospect and Prospect. Price $ 2.50 per copy. A 25-percent discount is allowed to booksellers and on orders for 100 or more copies shipped to the same address.

Name _____

Organization _____

Address _____

City, State, ZIP _____